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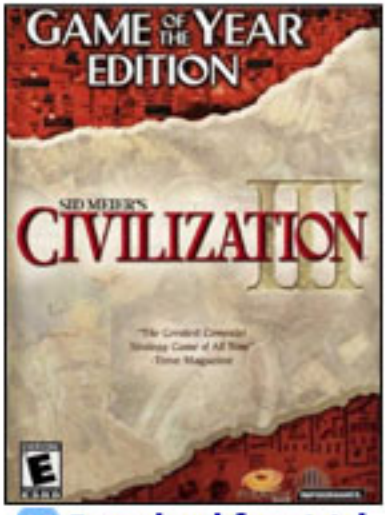

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THE README FILE

The *Master of Orion 3* CD-ROM game has a ReadMe file where you can view both the License Agreement and updated information about the game. To view this file, double-click on that file in the *Master of Orion 3* directory found on your hard drive (usually C:\Program Files\Infogrames Interactive\ *Master of Orion* 3). You can also view the ReadMe file by first clicking on the START button on your Win98/Me/2000/XP taskbar, then on Programs, then on Infogrames Interactive, then on *Master of Orion 3*, and finally on the ReadMe file item. We strongly encourage you to take the time to read this file in order to get the benefit of changes made after this manual went to print.

SYSTEM REQUIREMENTS

Operating System: . . . . . Windows® 98/Me/2000/XP
Processor: . . . . . Pentium® II 300 MHz or higher
Memory: . . . . . 128 MB RAM
Hard Disk Space: . . . . . 800 MB Free
CD-ROM Drive: . . . . . 8X Speed
Video: . . . . . Windows® 98/Me/2000/XP-compatible video card* (800 x 600 x 16 bit)
Sound: . . . . . Windows® 98/Me/2000/XP-compatible sound card*
Multiplayer: . . . . . TCP/IP (LAN or Internet)
Modem: . . . . . 56k or higher for Internet play
DirectX®: . . . . . DirectX® version 8.1 (included) or higher
Controllers: . . . . . Mouse/keyboard

** Indicates device should be compatible with DirectX® version 8.1 or higher.*

SETUP AND INSTALLATION

1. Start Windows® 98/Me/2000/XP.
2. Insert the *Master of Orion 3* CD-ROM game disc 1 into your CD-ROM drive.
3. If AutoPlay is enabled, a title screen should appear. If AutoPlay is not enabled, double-click on the "My Computer" icon on your Win98/Me/2000/XP desktop. Next, double-click on your CD-ROM icon to install the game. If the install screen still does not appear at this point, double-click on the "setup.exe" file in the root folder of the *Master of Orion 3* game disc.
4. Follow the remainder of the on-screen instructions to finish installing the *Master of Orion 3* CD-ROM game.
5. Once installation is complete, click on the Start button on the Win98/Me/2000/XP taskbar and choose Programs/Infogrames Interactive/Master of Orion 3/Master of Orion 3 to start the game.

Note: You must have the *Master of Orion 3* game disc 1 in your CD-ROM drive to play.

INSTALLATION OF DIRECTX®

The *Master of Orion 3* CD-ROM requires DirectX® 8.1 or higher in order to run. If you do not have DirectX® 8.1 or higher installed on your computer, click "Yes" when asked if you would like to install it.

THE ORION SECTOR PART I

CENTER ONE

The native name of this system is lost to time, and now is remembered only by the cold moniker "Center One." Situated in the Galactic Core near an unstable wormhole nexus, Center One gave rise to a unique civilization, a combination of the system's original inhabitants and numerous visitors from other systems who, trapped by the unpredictable effects of the nexus, chose to stay there rather than gamble with its capricious nature. In this way, Center One's original civilization blossomed into a multi-species culture, diverse in ideas, sciences, beliefs, and language.

The wormhole nexus was a curious affair, a single point that orbited Center One's star (often referred to as Solarus, "the first sun") in a highly elliptical orbit. That point served as the endpoint for many other wormholes throughout the galaxy. However, traveling through that point led not to a fixed destination, but rather to ever-changing locations that even the most advanced calculating machines of the time could not predict with any accuracy. All that was known for certain was that nothing that entered or left the nexus ever returned from whence it came.

The presence of the nexus accelerated the natural aging process of Solarus, but at such a slow rate as to go unnoticed by local astrophysicists. Only when Center One's ruling factions determined that the best solution to eliminating criminals and undesirable elements from their society was by sending them on a one-way trip through the nexus did the sun's degeneration become evident. Thousands of massive "exile" ships were dispatched in this manner, carrying with them the undesirables of Center One society and enough resources to keep them alive and well until they landed, theoretically. But this increase in usage of the wormhole nexus led to its own increased instability, and through that, the destabilization of Solarus itself to the point where it began its final countdown to nova a few billion years early. With barely a century to spare, Center One's civilization faced total annihilation.

The government sponsored several programs to create giant colony ships capable of carrying its people to safety through the wormhole nexus, ironically following the outcasts that they themselves had deemed "undesirable." Other independent factions worked on their own to create similar ships. Dozens were launched before Center One finally vanished in its sun's death cry.

Though future historians would often speculate on the precise location of Center One, more pressing events put such studies on hold until they became nothing more than fodder for authors of speculative fiction.

Historical Note: One of the unique achievements of the Center One civilization was the establishment of a calendar based not only on the revolution of its primary planet around Solarus, but on the position of the wormhole nexus as well. As a result of this, Center One "cycles" were of variable length, from one to two Human years in duration. The mathematical formula for calculating the length of these cycles was extremely precise and allowed for the determination of cyclical lengths thousands of cycles in advance. For the purpose of historical consistency, this record will use 1 GC (Galactic Cycle) as the year that the Center One star went nova. 0 GC is the year prior to that, and years before then are measured in negative GC

Historical Note: One of the many species that inhabited the Center One system was less heterogeneous than most. This group occupied a terraformed moon and interacted little with the rest of Center One society. They were, however, extremely intelligent and equally militant, providing the system with a local defense force and occasionally participating in large-scale research projects, including studies of the wormhole nexus. This species would one day be called Antarans. They themselves were the creation of another, older race that had deliberately sent them to Center One for reasons yet unknown...

THE EXODUS

It is estimated that over a hundred million people left Center One before its destruction, whether willingly or unwillingly. Those forced out by governmental relocation programs were known as the Exiles, while those who went in the evacuation ships were remembered as the traveler tribes, or just Travelers. The journeys of the Travelers became the stuff of legends among the tribes, even as the tribulations of the Exiles became their mythologies. Not everyone who left Center One made it to safety; many colony ships were lost before ever finding safe haven, and many others started colonies that failed and faded away.

The Exiles were fortunate, in a sense. They were sent through the wormhole before its instability grew to dangerously erratic levels, and were deposited within a concentrated area of space on the other side of the Galactic Core. Some were even lucky enough to end up in the same systems together. Regardless, they took several centuries to establish themselves on a score of neighboring systems in the galactic core, and using slower-than-light (STL) drives and some stable wormholes managed to reunite and form a clannish empire. This organization of Exiles was government at its most basic, barely a step above anarchy, for they were all criminals, dissidents, rogues, and other unwanted members of Center One's "elite" society. But they were united by their common situation, and they were hungry for revenge against those who had cast them out. It drove them to prosper as best as possible, and from there, build up a force that would one day strike back at their oppressors. They named the central star in their empire Mizar, after a mythological God of Vengeance, and called themselves the Mizara.

The Travelers were better equipped and prepared than the Exiles, and therefore when they settled on their new homeworlds, they were able to quickly establish colonies and secure their positions. However, as many of them passed through the wormhole toward the end of its life span (it was destroyed when Solarus finally went nova), the random distribution pattern of the nexus scattered them much farther apart than the Mizara were. Further, the majority of them ended up in one of the galaxy's spiral arms, where the lower stellar density slowed down exploration of local space.

During the centuries that the Mizara were building their empire and their forces, the Travelers were ever-so-slowly developing their home systems and probing neighboring stars for signs of life.

Among the many Travelers, the two most notable examples were the scientific elitists who settled in the Orion star system, known as the Orions, and the militant isolationists who settled in the Antares star system, known as the Antarans. Both of these groups were fortunate enough to colonize extremely rich and fertile worlds that allowed them to expand and develop far more rapidly than most of the other Travelers. To the Antarans' advantage, they were closer to the Galactic Core, and thus had several star systems within close reach for expansion. To the Orions' advantage, their original population included some of the best scientists and engineers from Center One, and this gave them the technological edge over the other Travelers.

Several other Travelers also developed at an excellent pace, having chosen similarly bountiful systems in the lower galactic arm to colonize. Together the Orions, the Antarans, the Dubhei, the Shaula'a, the Bellatricians, the Meissans, the Alioth, the Mintakans, and the Saiph would shape galactic history.

THE SPEED OF LIGHT

The one thing inhibiting the expansion of all the Travelers and Exiles was light speed. Up until then, even with the great advances from Center One's civilization and additional discoveries made by the tribes' scientists, exceeding the speed of light and traveling through hyperspace remained a mystery. Slower-than-light travel made colonization and expansion difficult, for it took many months just to travel within their own systems, much less to neighboring stars. Here the Mizara had the advantage, for even with STL travel, the stellar density in the core was such that neighboring stars were rarely more than one or two cycles distant at high sub-light speeds. Thus they were able to expand quickly, discover their neighbors who had been similarly exiled, and band together. Not so for the other Travelers, who frequently had to travel at least four to six cycles to find any nearby star systems at all, much less any suitable for colonization.

This slow tempo of expansion affected the way their civilizations viewed the timing and pacing of cultural advancement. They developed an incremental approach to societal evolution, avoiding rapid cultural shifts and socio-political upheaval by improving their civilizations gradually.

Historical Note: This "Social Incrementalism" theory is based largely on what was discovered about other STL empires of this period that developed but did not survive. Common among their ruins was a pattern of rapid technological advancements that ended abruptly amid relics of warfare and civil breakdown. The hypothesis was that, because their cultural development was more transitory than long-term, each of these civilizations "went nova" and burned itself out after a bright but brief period of time.

But science marched inexorably onward, and soon the remaining Travelers discovered the secrets of faster-than-light travel and the use of hyperspace. This led to a rapid drive for expansion and colonization among all the Travelers, who were eager to spread out into the stars and find their lost brothers, wherever they might be. However, for centuries the Travelers expanded alone, finding no traces of those who had left Center One with them. Some found the remains of failed Traveler groups; others discovered primitive species who were nowhere near as advanced as they themselves were.

Historical Note: It was fortunate that, during this time of FTL expansion, the Mizara had not yet discovered the secrets to FTL travel. This is not surprising, for the majority of the original population of the fragmented Mizara colonies consisted of the extreme lower class of society, not the most brilliant of scientists and engineers. As a result, their scientific progress was considerably slower and weaker than that of the other Travelers.

CHAPTER ONE: OVERVIEW

INTRODUCTION

Twenty thousand Galactic Cycles have passed since a supernova annihilated the diverse, multi-species culture of Center One. Over a hundred million sentient beings are believed to have left Center One before its destruction, whether willingly or unwillingly. These exiles and travelers spread out across their arm of the galaxy, and planted the seeds from which many powerful spacefaring civilizations evolved.

Over the course of eons, these civilizations explored vast ranges of interstellar space, expanded, and fought bitter wars of conquest. Many have fallen, and to those who remain the tales of the Elder Civilizations such as the Orions are mere myths, distant echoes of what might have been.

Yet the footprints of the Orions do remain, waiting for those inquisitive and persistent enough to find them. Artifacts of great power, and secrets powerful enough to transform entire civilizations, await those who explore this storied part of the galaxy. Other Elder Civilizations also exist, and beyond them, deep in the Galactic Core, another power grows slowly but surely. Are you prepared to become the Master of Orion, and to discover the truth behind the Orion Sector and its inhabitants?

Welcome to the world of *Master of Orion 3*. Your journey begins here.

MOUSE AND KEYBOARD SHORTCUTS

GALAXY MAP

MOUSE FUNCTIONS	
Select Star or Bring up Task Force Assembly	Left-click on Star
Go to System Survey Screen	Double Left-click on Star
Go to Selected Planet	Double Left-click on Planet on the System Survey Screen
Pan Map Left/Right/Up/Down	Move Mouse Pointer to Screen Borders
Pitch Map Up/Down	Right-click and Hold, Move Mouse Up/Down
Rotate Map Left/Right	Right-click and Hold, Move Mouse Left/Right
Zoom Map In/Out	Mouse Wheel Forward/Back

KEYBOARD COMMANDS	
Cancel any Open Window Go back one screen Zoom Galaxy Map Out	- (minus key)
Zoom Galaxy Map In	+ (plus key)
Pan Map Left/Right/Up/Down	Left, Right, Up, Down arrow keys

KEYBOARD COMMANDS (CONTINUED)	
Cancel any Open Window Go back one screen Quit only from the Main Galaxy Map	ESCAPE
Center on Homeworld	H
Cycle Forward/Backward Through Known Star Systems	S/SHIFT+S
Cycle Forward/Backward Through Colonized Star Systems	C/SHIFT+C
Cycle Forward/Backward Through Fleets	SHIFT+F
Toggle Distance between 2 star systems on/off. Click on Star, and then move cursor over another star to see distance between the two.	D
Process Turn	ENTER/RETURN
Situation Report. Press once to bring up, again to go away.	Spacebar
Galactic Encyclopedia. Press once to bring up, again to go away	F1
Technology Screen. Press once to bring up, again to go away	F2
Finance Screen. Press once to bring up, again to go away	F3
Empire Screen. Press once to bring up, again to go away	F4
Personnel Screen. Press once to bring up, again to go away	F5
Foreign Office Screen. Press once to bring up, again to go away	F6
Planets Screen. Press once to bring up, again to go away	F7
Ship Design Screen. Press once to bring up, again to go away	F8
Victory Screen. Press once to bring up, again to go away	F9
Toggle Through Panels (F2-F9 Screens)	TAB
Toggle Star Lane Borders On/Off	B (/)
Toggle Wormholes On/Off	W
Toggle Nebula On/Off	N
Toggle Fleet Icons On/Off	F
Go to Galaxy Map	G
Normalize Rotation	Enter
Normalize Rotation, Zoom and Scroll	Shift+Enter

SPACE COMBAT

SPACE COMBAT MOUSE FUNCTIONS	
Pan Map Left/Right/Up/Down	Move Mouse Pointer to Screen Borders
Pitch Map Up/Down	Right-click and Hold, Move Mouse Up/Down
Rotate Map Left/Right	Right-click and Hold, Move Mouse Left/Right
Zoom Map In/Out	Mouse Wheel Forward/Back
Select Task Force/Planet/Orbital	Left-click on Task Force/Planet/Orbital
Lasso Select Task Force(s)	Left-click and Drag over Task Force(s)
Select All Task Forces of that Type	Double Click on Task Force
Select Multiple Task Forces	Shift+Left-click on Multiple Task Forces
Selected Task Force Move	Right-click on Map
Selected Task Force Attack	Right-click on Enemy Task Force
Selected Task Force Patrol	Shift+Right-click on Map

SPACE COMBAT KEYBOARD COMMANDS	
Pan Map Left/Right/Up/Down	Arrow Keys
Pitch Map Up	End, Semicolon (;)
Pitch Map Down	Home, Single Quote (')
Rotate Map Right	Insert, Left Bracket ([)
Rotate Map Left	Page Up, Right Bracket (])
Zoom Map In	+ (plus key)
Zoom Map Out	- (minus key)
Selected Task Force Move	M or Right-click on Map
Selected Task Force Attack	A or Right-click on Map
Selected Task Force Patrol	P or Shift+Right-click on Map
Lock Camera on to Task Force	TAB
Toggle Follow Mode On/Off	F
Locked Top Down View	ENTER
Isometric View	Z

GROUPING TASK FORCES	
Group Task Force	Select Task Forces and then press Control 1-9
Select Group	Press corresponding row key (1-9)
Jump to Group	Double-press corresponding row key (1-9)

KEY GAME CONCEPTS

LAYER OF THE ONION APPROACH

Each player has an individual playing style. We therefore provide you with access to the information you want by providing numerous logical paths to find it, allowing you to navigate the UI quickly in a way that is most natural for you. **In *MOO3* a clear visual connection always exists between the present sub-screen/mode and that screen's hierarchy in the overall game.** Many items, words, or labels in *MOO3* are also tagged as hyperlinks that will immediately take you to a relevant screen, location, planet, space battle, ground campaign, etc.

So if, for example, your Situation Report (SitRep) notifies you of a revolt and you want to go to the specific planet where that revolt is occurring, you have multiple options for doing so. You may close the SitRep screen then navigate through the galaxy, first selecting the appropriate solar system and then the planet in revolt. Alternately, you could click on the hyperlink-style name of the planet on the Situation Report. Yet another way would be to go the Planet button from the bottom toolbar and select the planet from there.

GALACTIC ENCYCLOPEDIA

The Galactic Encyclopedia is your online hyperlinked database that supplements this manual. It is your catch-all information source for every aspect of the game. It contains information on technologies, races, ship types, star types, building types, political structures, economics, etc. Use it often!

SITUATION REPORT (SITREP)

At the start of each new turn the Situation Report (SitRep) pops up offering a summary of events and occurrences both new and pending. The SitRep is completely hyperlinked and will take you, with one left-click, exactly where you need to go. Think of it as your Galactic PDA.

THE GAME TURN

Each Game Turn represents approximately one to two "Earth years" of real time, or one Galactic Cycle (a duration determined by the orbit of the wormhole nexus around Center One, the birthplace of the original Orion civilizations). Because space and ground combat occur each turn if needed, each battle is therefore the culmination of approximately two year's worth of campaigning and maneuvers.

THE ORION SECTOR PART II

THE ANTARAN OUTLOOK

The Antarans, during this time, created a series of ultra-fast deep space probes to do remote exploration around their sector. Launching thousands of probes out into space, they searched for signs of habitable worlds, alien life, and their Traveler brethren. They focused heavily on probing the Galactic Core and its dense stellar population, looking for more worlds to colonize; they even searched for the remains of Center One. Now that they were away from the stifling Center One system, expansion became the primary objective on the Antarans' agenda. Their bellicose nature gradually led them to develop into a very rigid but efficient military dictatorship. As they expanded their borders, their innate sense of superiority coupled with their encountering nothing but the most primitive of life forms led them to an arrogant belief in their own "manifest destiny"— it was clear that the galaxy was theirs for the taking.

Historical Note: This attitude of the Antarans was preprogrammed into their instincts by the race that engineered them. Again, the true purpose for this remains a mystery...

This belief took a solid slap in the face around 1390 GC, however, when one of their probes accidentally passed through a mono-directional wormhole and ended up on the other side of the Galactic Core, in the middle of Mizara territory, and more accurately, in the middle of a Mizara war fleet. The probe transmitted several moments of footage that shocked the Antaran Central Command: thousands of unidentified but well-armed ships patrolling a heavily populated system. Brief scans of the ships showed weapons technology comparable to that of the Antarans themselves. The probe was destroyed quickly, but the Antarans had seen enough: someone else was out there, and they were not to be trifled with.

This discovery would alter their outlook forevermore. Fearful and envious of an unknown civilization that might challenge their claim to the galaxy, the Antaran leaders instituted sweeping policy changes that affected every aspect of their society, increasing their internal security and espionage forces, pumping massive energies into research, and making sure that the entire empire was under direct and absolute control of the Antaran Central Command. This new outlook would remain with the Antarans for millennia to come.

FIRST CONTACT

The exact date that the Travelers first met each other is now lost to history; the Orions believe their encounter with the Dubhei was the earliest, but studies of Antaran military records indicate that the Antarans may actually have found and killed at least two Traveler groups many years before. Most records from this early time period have been lost, and so it may never be certain when the Travelers were reunited. Regardless of historical inaccuracies, the relative proximity of seven of the original Travelers led to a broad reunion over the course of a century of exploration somewhere around 1600 GC.

Historical Note: The seven tribes that occupied a significant portion of the lower spiral arm of the galaxy were the Orions, the Antarans, the Alioth, the Meissans, the Dubhei, the Mintakans, and the Saiph. The Shaulas and the Bellatricians had indeed been killed or assimilated by the Antarans during their expansions many years earlier. Only three other Traveler tribes survived the exodus from Center One: the Polarids, the Denebi, and the Tarazedi. The Polarids developed an empire very quickly on another edge of the galactic core, and would soon encounter the Mizara. The Denebi and the Tarazedi ended up on the opposite side of the galaxy. Their story will be told another day...

The legends of the reunion of the Travelers were many, all epic tales of a glorious first contact and the incredulity and joy of finding each other after so many centuries apart. As is often the case, the truth was nothing like the rosy picture painted by mythology. Fifteen centuries of separate evolutionary, cultural and social development had rendered the Travelers completely unrecognizable to each other. It took over a century for researchers to gather enough data from linguistic similarities and historical records to realize that they all were descended from the original Travelers who had left Center One. With the confirmation of this discovery, the progeny of Center One felt that they were the ones destined to shape the galaxy's future. As they met and related old tales and exchanged ideas, they began calling themselves "Elder Civilizations," for none of them had found any evidence of anyone above and beyond them. None save the Antarans, at least... but they held their secrets to themselves, for even with the joy of reunion, the meetings between Elder Civilizations were not always friendly affairs.

Centuries of separation had neutralized the once heterogeneous nature of Center One's civilization. Now, the different Tribes viewed each other with a little more suspicion, a little more unease than before. Questions hung unspoken in their meeting halls: Who was the stronger? Who had more technology? Who had better worlds? Who was a threat? Their differences became food for suspicion, and mutual coexistence became a more and more distant concept with each passing cycle.

THE DAWN OF THE ORION SECTOR

In a bold, long-term experiment, the Orions sought to resolve this conflict by studying its effects among more primitive species. Within their territory were many worlds already occupied by native life forms, some of which were already sentient. Subtle genetic manipulation of these races allowed them to evolve and develop at accelerated rates, and the Orions observed these base cultures and their histories in an effort to gain insight into their own dilemma.

In this manner, the Orions manipulated and studied dozens of primitive societies within their sector, trying to duplicate the conflict the Elder Civilizations faced in myriad small-scale scenarios. Though it is unknown whether such research ever produced any results that the Orions wanted, the experiments did give rise to the races that would one day call themselves Mrrshan, Bulrathi, Klackon, Psilon, and Alkari.

Historical Note: It is interesting to note that all of the races who were experimented on by the Orions eventually developed religious or mythological stories of ancient and powerful god-like beings descending from the sky in chariots or ships of fire. The Orions' presence did not go unnoticed, and in the end, these stories became their legacy. Some of these legends would one day drive the young Orion races to claim that they were the true heirs to the Orion throne.

Historical Note: The Humans were also thought to be a remnant of this experiment, although the Humans would vehemently deny such an insulting view of their origin, believing instead in their own divine creation. They are, however, the result of another experiment...

Genetic engineering was not a new technology, but it had frequently been relegated to smaller duties such as agricultural enhancements, medical research or biological warfare. This was a new step, and it was a step that would be taken again, in ever-increasing strides.

CHAPTER TWO: GETTING STARTED

THE MAIN MENU

The Main Menu allows you to begin new games, load saved games, start a multiplayer game, adjust game options; view credits and quit when you've had enough. To navigate your way around the Main Menu simply point the mouse pointer to the option you want (it will highlight) and left-click to select it.

NEW GAME

Begins a new game and leads you through the Race Selection and Galactic Set-Up screens.

LOAD GAME

To load a previously saved game, select this option to bring up the Load Game screen. Select the game you want to load by highlighting one of the save game slots and clicking on it. Then click on the Load Game button.

SAVE GAME

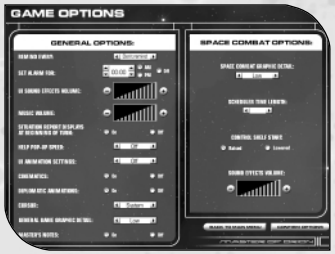
The game will automatically save your last turn. If you want to save a game at any point, select the Game Menu (see page 40), then choose Save Game. Enter a name for your saved game, or use the default name.

QUICK GAME

Quick Game uses the settings from your last played game to generate a new game automatically for you. After you have twisted all the knobs and made all your tweaks to your game settings, you can use the Quick Game feature to generate a new universe. Not happy with the cards you were dealt? Click again until you get the universe of your dreams.

GENERAL GAME OPTIONS

Allows you to adjust the various Game Options. The Confirm button will save your changes and return you to the Main Menu. The Cancel button will discard you changes and return you to the Main Menu.



SOUND AND MUSIC

Music Volume Slider

To adjust game music levels, position the mouse pointer over the Volume Arrow, then click and drag to the desired setting. You may also click anywhere within the box to jump to that setting.

Sound Effects Volume Slider

To adjust sound effect levels, position the mouse pointer over the Volume Bar, then click and drag to the desired setting. You may also click anywhere within the box to jump to that setting.

ANIMATIONS

Cinematics

Turn the game cinematics on or off.

User Interface Animations

Turn the user interface aperture menu animations on or off.

Diplomatic Animations

Turn the animations seen on the diplomacy screen on or off.

PLAY TIME REMINDERS

You can set reminders so that you don't forget that you do have a life on Earth. Work and school are optional; we are not responsible for loss of income, however, nor can we write a note to your boss/teacher.

General Reminder

These are time-based reminders. These are good for things like eating and sleeping.

Specific Reminder

These reminders can be used to make sure your family life does not completely go down the drain.

GAMER TIP: Always set your priorities. Live human encounters are beneficial to your well-being and add balance to your world.

Note: See the ReadMe file regarding video and performance settings.

MULTIPLAYER

Takes you to the Multiplayer Options screen, where you can connect up and test your mettle against human opponents.

CONNECTION WINDOW

The first thing you'll need to do is decide what sort of connection will be used to get to the other players. This can be either a Local Area Network (LAN) or the Internet.

LAN

Select this option if you're playing on a private network — in your own house, for example. All of the players must be located on the same local network. Typically, everyone will be set up on a single hub, or connected via the home or office's internal network cabling.

HOW TO FIND YOUR IP ADDRESS USING WINDOWS® 98/Me/2000/XP

When you play *MOO3* on GameSpy, you do not need to know your IP address. However, if you host a game on the Internet without the help of GameSpy, then any player who wants to join that game will need to know your IP address.

To find your IP address so that you can communicate it to other players, follow the steps detailed below:

Connect to your ISP (Internet Service Provider). *You MUST do this before continuing.*

1. **If you are using Windows® 98/Me**, click on the Start button on the taskbar, and then click on Run. When the Run window appears, type "winipcfg" (without quotes), and then click OK. The box labeled "IP Address" is your IP address for that session. **Note:** Your IP address may change each time you log on, depending on your ISP.
   If you are using Windows® 2000/XP, click on the Start button on the taskbar, then select Programs, then Accessories, and then click on Command Prompt. When the Command Prompt window appears, type "ipconfig" (without quotes), and then hit Return. Your IP address for that session will be displayed in the Command Prompt window. **Note:** Your IP address may change each time you log on, depending on your ISP.

2. If you are hosting the game, you must communicate your current IP address to the other players wishing to join the game. You can do this via:

   • **E-mail —** Use your e-mail program to send your IP address to other players, *OR*

   • **Phone —** Call the other players and tell them your IP address via a second phone line, *OR*

   • **Chat or Instant Message Programs —** Use programs such as ICQ or AOL Instant Messenger to send your IP address to the other players.

Helpful Web Site Addresses
ICQ — http://www.mirabilis.com
AOL Instant Messenger — http://www.aol.com/aim/

FINDING GAMES VIA GAMESPY
MOO3 incorporates GameSpy networking technology in order to make multiplayer games as easy as possible to set up and play. If you select GameSpy, you'll be able to see games hosted by players anywhere on the Internet, and be able to create games that those players can see. When you hit Create Game after selecting the GameSpy button, *MOO3* will contact GameSpy's servers and announce the creation of a new game.

Creating a Game
Once you've selected your connection method, click the Create Game button to set up your machine as the host for a new game, using the selected connection method.

Resuming a Game
If you've previously been playing a multiplayer game but quit for any reason, you and the other players can resume from where you left off. If this is what you want to do, click the Resume Game button instead of Create Game once you've selected your connection method.

CHAT WINDOW
This window works like the chat window in most other games. Type what you want to send into the text field at the bottom of the window, and either click the Send Message button or hit the Enter key. You'll see your message in the scrolling region above, along with the messages typed by any other players.

Infogrames Interactive does not monitor, control, endorse, or accept responsibility for the content of text or voice chat messages transmitted through the use of this product. Use of the chat function is at your own risk. Users are strongly encouraged not to give out personal information through chat transmissions. Kids, check with your parent or guardian before using the chat function or if you are concerned about any chat you receive.

AVAILABLE GAMES WINDOW
This shows a list of all games currently available through the connection method that you've selected. If you're on a LAN, *MOO3* uses "broadcast mode" to announce new games and listens for broadcasts from other servers. If you're on the Internet, connected via GameSpy, you'll see all of the games currently available via GameSpy's servers. If you want to join a game hosted by another player, select the game you want from this list and click the Join Game button.

Quit
Exits the game.

CHOOSE RACE SCREEN

You can choose to play one of 16 distinct races, each with its plusses and minuses. You may also create a Custom Race by clicking on the Customize button.

SELECTING A RACE
To select a "Stock" Race, move the mouse pointer over to one of the eight Species Tabs and click on it to activate the appropriate race sub-menus. Then move the mouse pointer over to a specific race name and click on it to select it. You'll see the race's "Picks" and attributes displayed, along with a graphical representation and a brief text description of that race's characteristics and tendencies. Once you are satisfied with your race selection, enter a race name and click on the Choose Race button to proceed. If you would like to tweak your race to your liking, use the Customize button and create specialized minions of your own.

Races have two sets of attributes: one that comes from their species (which is not user-modifiable), and one that is specific to their race, and that is generally modifiable by the player. For example, Trilarians always prefer worlds with lots of water, since they are aquatic by nature. But they can decide whether or not they want to start the game as members of the Orion Senate, or have special skills in trade or diplomacy. Those are skills that are not fundamental to their species.

SPECIES AND RACES

HUMANOID SPECIES

Human

The Humans are the master manipulators of the Orion Sector, and have ruled or actively attempted to do so for thousands of Galactic Cycles. Sly and greedy, they take by force only what they cannot take through negotiation or trade. Recent Humans claim to be descendants of the Ancient Orions. Although most empires of the Orion Sector scoff at the arrogance of such a presumption, there is enough uncertainty in Humanity's origins to lend credibility to this "ancient legitimacy"...

Evon

The Evon have confounded their Orion Sector neighbors with their extreme secrecy. Their people are easily recognized by their iridescent blue-black skin and shimmering gown-like clothing, and their cities and structures are elaborate and ornate, revealing an intricacy in design that seems to parallel everything that they do. They are both mystical and mysterious, a society rich in ceremony and ritual, evoking questions that they will not readily answer...

Psilon

The Psilons have always been devoted to the pursuit of knowledge, a devotion that borders on fanaticism. During the Dark Age, in exchange for favor from the Antaran overlords, the Psilons willingly allowed the Antaran geneticists to experiment on and manipulate their bodies to increase their capacity for learning and research. The Psilons of today are the result of centuries of horrific genetic reconstruction: mentally powerful, but with their bodies weakened to the point where they must use hover chairs to move and mechanical waldoes to physically manipulate items in their world.

CYBERNETIK SPECIES

Meklar

Calling themselves the "Pure Ones" to signify their complete separation from the corruption of biological matter, the Meklar are masters of mathematical and computer sciences, and their mechanical efficiency makes them both supreme industrialists and formidable foes in combat. Contemptuous of organic life forms (the "flesh beasts" of the Orion Sector), they also eschew their technologies, including economics and ecological science. They despise the Cynoid, their Cybernetik brothers who have not yet rejected their biological origins.

Cynoid

The Cynoid have not completely turned their back on their biological origins, and are cyborgs, unlike the completely artificial Meklar. The Cynoid are ruthless and brilliant when it comes to economic calculations and financial matters. They understand the value of money, how to work it, how to use it, and how to exploit it in every way possible. Outstanding barterers, they are often interested in improving the lot of their citizens to make them more productive and, hence, more taxable.

SAURIAN SPECIES

Sakkra

The Sakkra are closest genetically to the original Saurians that forced their own evolution and left the Ichthytosian homeworld in exile thousands of cycles ago.

They are highly aggressive, easily angered, and carry a bitter scaly patch on their shoulders. Their age-old hatred of the Ichthytosian species flavors every aspect of their society, and their drive to build and expand is often a pretext for finding and eliminating every trace of their ancient enemies.

Raas

The Raas were bred by their fellow Saurians as highly productive slave laborers, and were sold and used throughout the Orion Sector until the end of the Great War. They orchestrated a vast and bloody revolution that ultimately earned them their freedom. They left to found a new society, with their own governments and religion. Their industrious natures are still there, and now they finally have a chance to work for themselves and take their place in the history of the Orion Sector.

Grendarl

Grendarl society relies on two core ideals: loyalty and indifference to physical hardship. Their clan-based social structure emphasizes placing the group before the individual, with supreme honor resting on the concept of death before failing the Clan. They are warriors, deriving just as much honor and glory from battle with their foes as from supporting the Clans.

ICHTHYTOSIAN SPECIES

Trilarian

The Trilarians are one of the oldest races in the Orion Sector, and are known for being extreme traditionalists. They are a peaceful race, and their society places great emphasis on art, architecture, and philosophy. They have changed very little since the War of the Depths and the Second Exile, trying desperately to regain the glories of their past while preparing for the new future that awaits them in the Orion Sector...

Nommo

The Nommo are a cephalopodic species that once coexisted with the Trilarians. They left after the War of the Depths to found their own empire, based on their more radical and militaristic beliefs. They believe they are descended directly from the "Old One," the god of the first Ichthytosians who brought them wisdom (and who, ironically, was an Antaran scientist who began the first steps of genetic modification to the Ichthytosians). This delusion that they are "children of god" has occasionally led to holy wars against those who might deny them their birthright, most notably the Trilarians who still lay claim to what the Nommo consider "their" homeworld...

ETHEREAN SPECIES

Imsaeis

The Imsaeis are the most keenly observant of the Etherean races, which plays well with their ingratiating manner. Their ability to gain acceptance through good listening and humility has made them valuable participants in diplomatic negotiations, and has provided them with vast amounts of information and intelligence. The Imsaeis always know more than they say, and while on the outside they seem to be agreeable and engaging, secretly they are constantly striving to be in control of events around them.

Eoladi
The Eoladi give almost everyone a slight pause when they are first encountered, as each individual possesses his own personal code of ethics. Once understood and accepted, however, the Eoladi are valued society builders and competent leaders. These skills came from the aftermath of the Etherean War, when all Etherean societies were shattered and had to be rebuilt from scratch. The Eoladi still believe that they have much to teach to the other Orion Sector races in the ways of personal and social improvement.

GEODIC SPECIES

Silicoid
Curiously unique, the Silicoids represent a true divergence from other life and its origins in the Orion Sector. They are believed to have come about from the shards of a giant sentient crystal that was destroyed above their home planet. Each Silicoid begins as an asexually created shard, incubated in a nutrient bath, and eventually grows into an individual with all of the prior knowledge of its "parent." This efficiency comes at a cost of speed, however, so forethought and careful planning are key to any successful Silicoid society.

INSECTOID SPECIES

Klackons
The Klackon Hive Mind is the ultimate picture of a harmonious society working for the greater good of all. The Klackons revere this purity of social form, not even noticing the cost in creative or original thought. This unity of purpose makes the Klackons brutally industrious and organized, with leaders born for their tasks and directing the masses without question.

Tachidi
The Tachidi are among the largest races in the Orion Sector. Like the Klackons, they are extremely industrious and productive, but they have overcome the limitations of the Hive Mind and now view the universe with insatiable curiosity. This curiosity is their biggest challenge, however, as it is the curiosity of a child, one that does not know that you can hurt the puppy if you pet it too hard...

HARVESTER SPECIES

Ithkul
The Harvester Project was the result of the Antarans' quest for a biological agent that would infect most life forms and either kill them outright or render them mentally docile and obedient. It was a major endeavor, with dozens of research labs working on various facets of the project. And, in the end, the Antarans succeeded in breeding a parasite that did exactly what they wanted it to do. Now that parasite has been unleashed, and the Orion Sector races are right to be afraid of a species dedicated to wiping them out to the last.

CHOOSING A PLAYER FLAG

Now you must select a Flag or Banner that will be used to identify items within the game such as Deployment Centers and Empire seats in the Galaxy, System and Planet screens. In addition, your flag will be displayed in areas such as Diplomacy and Ship Combat where it may be necessary for you to discern at a glance what is yours and what belongs to another race.

RACE PICKS SCREEN

CREATING A CUSTOM RACE

You are not limited to playing as one of the sixteen "Stock" races of the Orion Sector. You can customize any of these races into a design of your own creation. To create a Custom Race, first select a representative Race from the Choose Race screen, and select the Customize button. Think of this as creating a unique mutant strain of that race.

This brings you to the Race Picks screen. Racial Picks (attributes) can affect your empire in either a positive or negative way. You may make adjustments to the specific pick option by selecting the appropriate radio button. A description of each pick option appears in the Selected Details box and will give you vital information on how it affects that specific Race Pick.

Browse through each Race Pick and adjust the options according to your tastes. As you adjust specific Race Picks, your pool of Pick Points (shown at the bottom of the Current Race Picks window) will increase and decrease depending on the type of setting you choose. Your current total spending for each Race Pick is displayed on the right side of the window. You are allowed to start a game with extra Pick Points remaining, but you are not allowed to start the game with a negative Pick Point total.

When you are satisfied with your configuration, you may enter a name for your new Race and then click on the Confirm button to move on. To reset all Race Picks back to the pre-set numbers for that Race, click on the Reset All Picks button.

GALACTIC SET UP

After choosing your race, you'll be taken to the Start New Game screen. Here, you'll set up the galaxy to match the kind of game you want to play. There are *Nine Big Decisions* that you must make in order to proceed.

RANDOM EVENT GENERATOR

This controls the frequency of random events, both helpful and hurtful, that occur during gameplay. Any race can be the target of an event, and some events affect all races. Events are self-explanatory, occur as the game progresses, and are conveyed in the SitRep at the beginning of each turn. Click on the Frequency list box to make your selection.

- **Rare** — Events will happen once in a blue moon.
- **Normal** — A good balance that will keep you on your toes but isn't too intrusive.
- **Frequent** — You'll be dealing with stuff left and right. Be prepared: frequent random events can lead to uncontrollable situations!

NUMBER OF STARTING COMPUTER PLAYERS

Determines the number of starting AI players. You can have from 1 to 15 opponents who are randomly chosen at the start a game. Choosing fewer opponents, naturally, allows you more time to develop colonies, technology, and fleets before you make first contact. Choosing more players sets up a galaxy destined for lots of action and conflict over scarcer resources. Click on the Spin Box Arrows to adjust the range of the starting number.

GAMER TIP: For an easier game, we suggest starting with just 1 to 3 opponents.

TIMER OPTIONS

Similar to "speed chess," Timed Turns put pressure on you to make all your decisions for that turn before time runs out. Additionally, Interest and Debt (see **Economy and Finance**) will be factored into gameplay, creating even more pressure to get things done as fast as possible.

- **Minutes Per Turn —** Sets the timed length of a game Turn, from 1 minute to 20 minutes. Click on the Spin Box Arrows to adjust the range.
- **Unlimited Time —** Check this box and you'll have all the time in the world to make your decisions. Interest and Debt will not be factored into gameplay. Selecting this feature overrides the Minutes Per Turn setting.
- **Minutes Per Space Combat —** Sets the timed length of a battle in the Space Combat mode. If combat lasts longer than this amount of time without a victory by one of the players, the combat will be terminated, players will be returned to the Combat Scheduler screen, and the battle will be declared a "draw." Note that this also applies to automated combats fought by the computer. If this time value is extremely short, or the combat is extremely complex, or both sides have incredibly strong armor, the computer may be unable to complete the combat in the designated amount of time, and the battle will therefore be declared a draw.
- **Unlimited Combat Length —** Check this box and you'll have all the time you want to play space combats. There will never be a timeout. Note that this also applies to automated combats. If you're in a huge battle that the computer needs to fight, or if the battle is difficult to resolve because both sides have extremely powerful armor, it will take as much time as it needs to resolve the combat before you can proceed to the next turn.

GAME DIFFICULTY

This sets the level of difficulty for the computer AI. Click on the Game Difficulty list box to make your selection.

- **Easy —** AI opponents will be less aggressive. Things will develop easier and you'll do better diplomatically.
- **Medium —** A well-balanced game that will challenge you to the fullest. If you feel like you're familiar with the basics of the game, including espionage and diplomacy, you're ready for this.

- **Hard —** Be prepared for the fight of your life. Your AI opponents will use every means at their disposal to prove you are a pretender to the title of Master.

GALAXY TYPE

Galaxies come in all shapes and sizes but for the sake of simplicity, in this game they're boiled down to seven specific classifications that give you the flexibility to play a quick game, a long drawn out saga or something in-between. Arm Galaxies are disk shaped while Clusters are spherical in nature. Click on the Orion Sector Size list box to set the size of the galaxy.

- **Two-Arm Galaxy, Large —** Will generate a large 2-Arm Galaxy containing approximately 150 stars. A good beginner's map when played with 3 or fewer opponents, this system will leave you with some room to expand before you make contact with other races.
- **Three-Arm Galaxy, Large —** Will generate a large 3-Arm Galaxy containing approximately 200 stars. A big map with lots of potential choke points and plenty of room to expand.
- **Three-Arm Galaxy, Huge —** Will generate a huge 3-Arm Galaxy containing approximately 250 stars. You'll have all the time in the world to expand, especially if you're out toward the rim, and may not even make contact with all races. Prepare for the long haul!
- **Cluster, Small —** Will generate a small Cluster containing approximately 50 stars. This guarantees early contact with other races, fierce competition for planets and resources, and a relatively quick game.
- **Cluster, Medium —** Will generate a medium Cluster containing approximately 100 stars. As with the Small Cluster, you'll have early contact with other races and play a fast-paced game.
- **Cluster, Large —** Will generate a large Cluster containing approximately 175 stars. You'll have time to develop your empire and gain some footholds before you encounter other races.
- **Cluster, Huge —** Will generate a huge Cluster containing approximately 250 stars. Even playing against 16 races, you'll have plenty of breathing room and expansion opportunities.

STAR LANES

Star Lanes represent "highways in the sky" that your spaceships and fleets can utilize while exploring the galaxy. You can set the length and frequency of Star Lanes by clicking on the Star Lanes box and choosing between Short or Long and among Few, Many and Lots to determine their density.

SPECIALS

Specials are galactic anomalies, such as solar winds, wormholes, black holes, and ancient space dust debris that can affect the galaxy and combat in a certain way for a random number of turns. Like the Random Event Generator, you can set the frequency of specials generated by clicking on the Orion Sector Specials list box and choosing either Fewer, Average or More specials.

COMBATS ALLOWED PER TURN

In order to ensure that complex multiplayer games move along at a reasonable pace, you can use this control to limit the number of combats per turn in which each player can participate. If this is set to three, for example, everyone will be allowed to join as many as three separate space combats per turn. If any given player has more than three combats, that player will be deemed to have declined to participate in the battle, and the computer will automatically resolve that player's combat. In effect, the player delegates the detailed management of the combat mode to the fleet admiral.

VICTORY CONDITIONS

The people and Leaders of your empire generally know what to do, but one thing they don't know how to do is win the game! That's where you come in. *Master of Orion 3* offers a variety of different paths to victory, each one unique in its approach. To select a Victory Condition, check the appropriate box by clicking on it.

- **SOLE SURVIVOR —** All other empires must be completed destroyed or subjugated to your control to win the game.
- **ELECTION TO LEAD THE ORION SENATE —** Through diplomatic maneuvering, manipulation, and deviousness, get yourself appointed to head the Orion Senate.
- **UNCOVER THE ANTARAN MYSTERY —** The most difficult and challenging of the victory conditions, this condition will require you to use your skills in every area of the game, from technical innovation and invention to the ability to infiltrate another empire undetected. In addition, you will need to send Task Forces on special missions of exploration into uncharted space (see Antaran Expeditions for further details).

START GAME

Once you've set up your options and are satisfied with your choices, click on the Start Game button to generate the Galaxy and bring up the Galactic Command Interface screen.

THE ORION SECTOR PART III

THE ELDERS CIVIL WAR

With the distrust and suspicion that was growing among the Elder Civilizations, the concept of peaceful coexistence grew increasingly distant as the shadow of war loomed large over their region of the galaxy. Despite the establishment of embassies within every empire, diplomacy itself was often strained and tense at best. Skirmishes at borders became more and more frequent, espionage was rampant, and war machines sprang to life at every corner.

The Elder Civilizations gradually polarized into two distinct factions — the Orion League, led by the technologically advanced Orions, and the Central Entente, led by the militaristic Antarans. The Antarans chose their allies carefully, inviting the Alioth and the Meissans to ally with them. All of their empires had borders on or near the galactic core, which would, the Antarans hoped, eventually give them a clear and easy path of access to combat the lurking menace within. With the Orion League occupying larger portions of the spiral arm, the Antarans also reckoned that the Orions would eventually have nowhere to expand except into the wall that would be Antaran space, and the Antarans had every intention of making that wall unbreakable. The two factions were sitting on a powder keg, and the fuse was terribly small.

A border skirmish between the Alioth and the Dubhei in 2103 GC provided the spark to light that fuse, and they soon escalated hostilities from brushfire war to limited war to all-out galactic warfare. Each faction was called upon to support its ally, and within scant cycles all the Elder Civilizations were involved in a galactic civil war, the likes of which has never been seen since. Whole planets, suns, and star systems were annihilated as the battles raged, claiming billions and billions of lives. Fleets of ships dashed themselves against each other in brutal contests for territory. The Elder Civilizations lit the galaxy on fire with their immense and bloody conflict.

Historical Note: The local Orion races of circa 17000 GC would one day be awed by the power that the Guardian of Orion wielded, from its crew-killing Death Rays to its nearly impenetrable Kintium Armor and much more. Those races would fail to realize that the Guardian was little more than an AI-controlled battleship in the ancient Orion Navy, and that ships many times larger and stronger had once existed...

Historical Note: In this area of space, only the Gargantua Civil War (15995-17013 GC) came close to rivaling the sheer destruction that the Elders caused in their battles.

Throughout the war, Orion diplomats sought to lessen the hostilities, even as their scientists studied the primitive races within their sector for clues on what could be done to stop the war. But the Antarans were determined to see it through, driving their forces to fight with fanatic zeal, believing that victory would make them stronger, and grant them the territory and resources they would need for a war in the galactic core. For 400 cycles, the seven Elder Civilizations strove to exterminate one another. But ultimately, the outcome of the war was decided not by soldiers, but by scientists.

The Trinity Project provided the Orions with what they felt was the most bloodless and direct solution to the war. Using principles learned from the recently discovered field of Trans-Dimensional Physics, the Orions theorized that they could "imprison" the Antarans in an other-dimensional space akin to the "space" contained within wormholes or hyperspace. The idea was that the entire Antaran Sector could be enveloped in a bubble that would then be transported into another dimension and thus isolated from the universe. The Orion scientists were not entirely certain where that would be, but they all agreed that anywhere was better than where they were: leading the Central Entente in a war that was costing hundreds of millions of lives a year. Various experiments with objects of different sizes seemed to demonstrate success, and the power of a device needed to envelop an entire sector would not be beyond the capacity of a well-protected doom star, and so the plan to transport the Antaran sector was approved by the Orion League leaders.

Antaran intelligence, however, was extremely pervasive, and soon infiltrated even the top-secret labs where the Trinity Project had been finalized. Too late the Antaran Central Command received the transmissions from their spies; too late they realized that the Orions did indeed have a means of stopping them. The Antaran Supreme Commander was issuing orders to his fleets to evacuate the sector when the doom star *Trinity* reached the heart of the Antaran Sector and activated the dimensional encapsulator.

In a heartbeat, the entire Antaran Sector vanished from space, never to be seen again.

Historical Note: Orion scientists often wondered what exactly happened to the *Trinity* at that moment; it was never verified whether the ship was destroyed with the use of the encapsulator, whether it went into other-dimensional space with the Antaran Sector, or whether it remained behind as a derelict within the dead zone left behind by the Antaran Sector...

THE LONG NIGHT

With their strongest ally neutralized, the other civilizations in the Central Entente soon caved in to the overwhelming power of the Orion League. The Orions, now clearly the dominant civilization, dictated the terms of surrender, and in 2539 GC formed the short-lived Orion Federation, setting up an elaborate throne for the first (and only) Orion Dynastic Chancellor on their homeworld.

Not long after the end of the Elders Civil War, the grim aftereffects of the Orions' experiments in Trans-Dimensional Physics came to light. Radiating out from the center of the Antaran Sector (now nothing more than a vast empty region of space that explorers called the Dark Zone) came a wave of disruptive energy that completely destabilized all hyperspace travel. One by one the Elder Civilizations' empires were swallowed up by the hyperspace flux, paralyzing their ships and isolating many of their worlds. Some systems that relied on interstellar commerce for food and supplies starved and collapsed. Others, cut off from their original homeworlds, were forced to become their own independent empires.

The Orion Federation turned on the Orions, blaming them and their Trinity Project for the hyperspace flux, and demanding that they undo the Antarans' imprisonment. Unfortunately, the Orion scientists had not worked out a means of retrieving anything stored in other-dimensional space, and thus had no idea as to how to either undo the Antaran's prison or repair the damage done to hyperspace. They worked desperately to find a solution, even as, one by one, the Elder Civilizations' communications channels were cut off by the hyperspace flux, their last words frequently damning the Orions for their destruction. The people of Orion blamed their leaders for the disruption of hyperspace, and protested against them with increasing fervor. In a final act of desperation, the Chancellor ordered the preparation of a research task force, loaded with the best equipment available, and dispatched the scientific community en masse to research a solution to the hyperspace flux away from the increasingly unstable Orion system. The task force was placed under the command of the Chancellor's sole heir in an effort to protect the Orion lineage should the Chancellor himself be slain in an upcoming revolution.

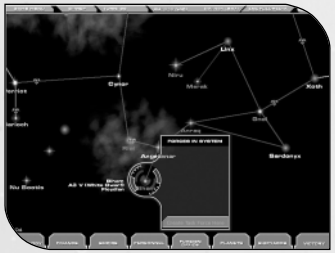
The Orion system itself was defended by a lone battlecruiser, later known as the Guardian of Orion, which the military high command had equipped with top-of-the-line weaponry and the most advanced cybernetic AI and self-support mechanisms available. As predicted, the people of Orion rose up against the government, and the revolution that followed (assisted by the detonation of numerous biological warheads) drove the population down to the point of no return. Within a few thousand cycles, the people of Orion were no more.

This hyperspace flux would ebb and flow for nearly 15,000 Galactic Cycles, with occasional periods of calmness that would allow for FTL travel. But, always, the flux would return...

Historical Note: Although the Orions in the Orion system eventually died out, other pockets of Orions survived, isolated from the rest of the sector by the hyperspace flux. The same fate befell most of the other Elder Civilizations. As for the Orion Research Fleet, they were never heard from again, although traces of them have been found on many planets throughout the sector. The Dynastic Chancellor's heir was also lost to time, leading to speculation as to whether he might have founded a new colony, named a new heir to follow him, or, as popular legend suggests, infused his own genetic material into developing local races, giving rise to the belief that any of the local Orion races could unknowingly be harboring an heir to the true Orion throne...

CHAPTER THREE: MAIN GAME/GALAXY VIEW

GALACTIC COMMAND INTERFACE



When the galaxy has been generated and the game begins the first thing you'll see is the Galaxy Map and the Galactic Command Interface screen. This is the central interface from which you conduct your entire imperial campaign. Several useful components can be found on this interface — including the map itself! At the beginning of most campaigns, that's all you see in the galaxy, but as you explore your stellar neighborhood, other things gradually show up on the map.

The center portion of your screen is a 3D map of your entire galaxy. The Galaxy Map can be rotated and zoomed by using the following keys:

GALAXY MAP KEYS	
Mouse Rollover	Highlight Star
Left-click	Select Star
Page Up	Rotate Galaxy Left
Insert	Rotate Galaxy Right
Home	Rotate Galaxy Up
End	Rotate Galaxy Down
Equal Key (=)	Zoom In
Minus Key (-)	Zoom Out, Back one screen

Think of the Galactic Map as having three layers: the Galaxy Layer, the System Layer, and the Planet Layer. Let's take a look at the Galactic Map and how you go about navigating through layers and selecting stars and planets.

The galaxy is "discus" shaped — like a pancake that's thicker at the center than at the edges. Depending on the selections you've made at the start of the game, it may be a simple cluster of stars, or may have two or three "arms" like the Milky Way.

Every star system you can visit is shown on the map in the color of its primary star. If you look closely, you'll notice that your Home System is labeled by Name and in your Imperial Color. After you have explored other systems, their labels will show up as well. Systems colonized by any race (including yours!) are labeled in that Empire's color. When you control systems (have more planets there than anyone else) at both ends of a star lane, that lane will be displayed in your empire's color. There will also be a flag in your empire's color next to each star with a Deployment Center, and a special one for your Empire seat.

Another special characteristic of the *MOO3* galaxy: it's set up to make it easy to navigate when seen from the top-down view. None of the stars overlap, and all of the Star Lanes will be easily visible. Even if you've spun the Galaxy Map around, you can always return quickly to this top-down view by hitting the "G" key.

Each star has up to eight planets, each of which can have up to five moons. The System screen shows you all of the planets in a given solar system and summarizes the important information about each.

Near the Center of the galaxy is the star Orion, which once led the mighty Orion League in this sector of space. Nearest Orion will be stars that feature older, more developed and "civilized" worlds and governments — or that once did. Around the edges of the galaxy are likely to be the newer, rising civilizations.

Each star generated will use the standard astronomical nomenclature to describe it in addition to its name. While each solar system can have a maximum of eight planets each with five moons, the average will be four planets with two moons each. Note that some stars will be so big or so hot that the inner planetary orbits do not exist — anything that might have been there at some point in the past has been incinerated.

Larger planets will tend to have more moons and those moons will tend to be smaller compared to their parent planet. Conversely, smaller planets will tend to have fewer moons that will tend to be closer to planet in size. You may sometimes find "double planets" in which a planet and its single moon are nearly the same size.

The Spectral Class (color) and size of a star will affect the nature of the solar system around it. In game play terms, you can use these to guide your civilization in choosing which stars to explore first. That's because stars of a certain Spectral Class and size will tend to offer the best chances for a given race of finding a habitable planet or moon. Temperatures are measured in degrees Kelvin, which are the same as Celsius measurements except that zero is at absolute zero instead of the freezing point of water. Zero Celsius = 273 Kelvins.

GAMER TIP: Generally, as you might expect, hotter stars will have hotter planets, but the situation is a little more involved than simply looking at the stellar temperature. A planet's temperature is based on the total amount of radiation received from the star's surface, which depends on the star's size as well. A large, cool star may end up delivering more warmth to a planet than a small, hot one.

Violet-White stars are the hottest, followed by Blue-White, White, Yellow-White, Yellow, Orange, and Red. Typically, the hotter stars are the younger ones; they tend to fall in the middle of the size range. Cooler stars are usually very small or very large. Red giant stars, like Betelgeuse, can often be enormous. That star would stretch all the way past the orbit of Mars in our solar system.

To select a Star, simply move the mouse cursor over it and it will highlight to get information. You can then double-click on any star you have already visited to open up the System Survey screen.

GAME TOOLBAR

Along the top of the Galaxy Map is the Game Toolbar. This controls saving and loading, turn processing, and a few other things. From left to right, you have the following options and information at your disposal.

GAME MENU

Click on the Game Menu button to Start a New Game, Load a Game, Save a Game, and Exit from *MOO3*.

SITREP BUTTON

One of your most valuable tools is your Situation Report screen. Click on the Situation Report tab or press the spacebar to bring up the SitRep reports on events and activities that occur in the empire. These events may range from new wars, to new planets, to new buildings. The SitRep screen will show up at the beginning of each turn, highlighting key events from the previous turn.

For each event, there are two icons. The first is prioritized based on importance level. Events colored red require immediate attention — new wars, first contact with new civilizations, revolts, and so on. Yellow events are important but not urgent. They include routine diplomatic messages, new laws in the Orion Senate, reports of minor unrest, and the like. Green events are strictly informative in nature, and usually involve completion of routine construction projects. The second icon shows what screen, event type or area of the game to which it pertains (Planet, System, Technology, etc..).

Many events feature hyperlinks to specific screens. For example, if a message involves a planet, you can click on the planet name to be taken to the Planet screen. Similarly, Diplomatic messages include hyperlinks to the messages they announce, and messages announcing new Leaders include links to the Leaders panel of the Personnel screen.

GAMER TIP: If you want to focus only on certain categories of events, you can filter out the ones that don't interest you. Players will often filter out Green events, for example, in the later phases of a game.

TIME

Click to get clock, turn, and current Galactic Cycle.

INTEREST ON TURN

Shows how much Interest/Deficit you are accumulating each turn. The Green Bar gives you an at-a-glance view, while holding the mouse cursor over the bar will give you a hard number. This feature only functions when you are playing a game with time-based turns.

GALACTIC ENCYCLOPEDIA

The Galactic Encyclopedia is your online hyperlinked database and supplement to this manual. It is your catch-all information source for every aspect of the game. It contains information on weapon technologies, races, ship types, star types, building types, political structures, economics, etc. Use it often!

Using the Galactic Encyclopedia is simple and intuitive. To open it, click on the Galactic Encyclopedia button at the top of the screen. You can browse by Table of Contents or by Subject Index by clicking on either button, or type in a keyword and hit the Find button to search for something specific. You can also jump to related entries by clicking on the hyper-linked (underlined and colored) text next to the picture. To close the Galactic Encyclopedia, click on the Galactic Encyclopedia button or press the ESCAPE key.

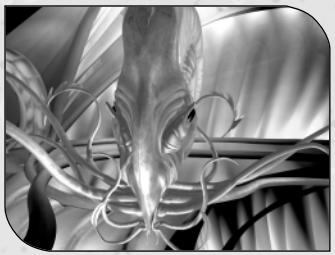
TURN BUTTON

When you're done making adjustments to your colonies, moving fleets, and whatever else needs doing, you signal the end of your turn by clicking the Turn button. Once you do this, things are out of your hands until every other race has had their turn and all the production and random events have been finished. If you are playing with non-timed turns, one turn takes place every time you click the Turn button.

If you are playing with timed turns, time will flow until either (1) you click the Turn button, or (2) your time runs out, in which case your turn ends and the computer takes its turn(s).

THE ORION SECTOR PART IV

THE ANTARAN HEGEMONY IS FORGED



A small handful of Antaran systems remained outside of the trans-dimensional prison, cut off from each other and from Antaran Central Command. They worked hard to overcome the limitations of STL travel and find each other in an effort to rebuild the Antaran empire. The confederation of systems around the Dark Zone became known as the Antaran Federation, and over the millennia, they gradually shifted their focus to internal development, building up their planets and establishing defensive (albeit powerful) fleets to protect themselves.

The Antarans trapped within the trans-dimensional prison, however, were free to plan and prepare without interruption. Strangely enough, hyperspace travel was completely normal within the bubble itself, and thus the integrity of the Antaran Empire was preserved. Furthermore, the Antarans had received most of the data on Trans-Dimensional Physics from their spies, and therefore had time to study the research in an attempt to free themselves. And finally, they could build up their systems to the height of efficiency and power, devoting their time to perfecting their environments and leaping ahead in research and technology without wasting time on conflict, for no one could enter their prison any more than they could leave it.

Scientific Note: It was during this time that the Antarans made tremendous strides in the fields of Trans-Dimensional Physics, Wormhole Physics, and Genetic Manipulation. These particular subjects would later aid them in the domination of their corner of the galaxy.

Around 6000 GC, the Antarans finally managed to engineer a breach in the trans-dimensional prison. Using a device they aptly named the "Trans-Dimensional Portal," they could theoretically send material (specifically, warships) from their dimension into the galaxy with minimal difficulty. The first prototype TDP was set up in an uninhabited system populated only by asteroids and tiny barren worlds (Antaran Central Command was slightly concerned that opening a dimensional field within their own dimensional prison could have disastrous consequences, and thus placed the portal as far from inhabited systems as possible). A specially prepared task force consisting of ships equipped with Dimensional Drives (another experimental device that would, in theory, permit the ships to return to the same TDP they had launched from) awaited the opening of the portal. The portal opened without incident, much to the relief of Antaran Central Command, and the Antaran task force that passed through appeared quite unexpectedly in the middle of the thriving Antaran Federation, much to everyone's surprise.

The reunion was not pleasant, to say the least; almost 4,000 cycles of divergent evolutionary paths had taken their toll, and the two groups of Antarans were completely unrecognizable to each other. Federation forces engaged the invading fleet and beat them back; this prompted Antaran Central Command to dispatch a larger fleet the second time. This war continued for several cycles until Federation researchers discovered that their enemies were, in fact, Antarans like themselves. This discovery led to a cease-fire as each side weighed its options. Finally, they settled on a truce, reuniting as two different Antaran states under one banner, and the Antaran Hegemony was born.

Further research allowed the Antarans to refine the TDP system, increase the efficiency of hyperdrives, and even undo the dimensional prison completely. But the forward-thinking Antaran leaders now looked on the prison more as a fortress protecting them from all outside forces, both Orion and otherwise. Only the TDPs would grant access to the Antaran Sector, and the Hegemony controlled them all. To protect their breakthroughs in Dimensional Physics, all their ships equipped with Dimensional Drives were also equipped with a Quantum Detonator, designed to self-destruct the ship should it take sufficient damage and thus prevent their capture by enemy forces.

Though hyperspace travel was still unstable outside of the trans-dimensional prison, the Antarans built a number of TDPs to grant them access to a limited radius around the Dark Zone (a range equivalent to the diameter of the spherical dimensional prison; this limit was a side effect of the Long Night and, fortunately for other races in the sector, prevented the Antarans from raiding everyone into extinction). They launched raids into nearby systems once held by the Saiph and the Dubhei, former Orion League members, stealing their resources and technologies and blasting whatever empires had developed into atoms. By eliminating those potential threats, they knew they would be able to concentrate even more on the Mizara one day.

The Antaran Hegemony then took more aggressive steps to improve their standing. Genetic manipulation was to be the next great weapon in their arsenal, and they practiced on numerous developing races within their own and the neighboring sectors. Two of the most noteworthy species that the Antarans "created" were the Ichthytosians and the Ethereans; however, it is suspected that dozens of other local worlds were visited by Antaran genetic engineers and adjusted via similar experiments.

THE ICHTHYTOSIAN EXPERIMENT

The purpose of the Ichthytosian experiment was to breed aggressive front-line soldiers to be used in upcoming conflicts as disposable shock troops. A rapid acceleration of the evolution of an aquatic species, tinged with the amplification of aggressive behavioral modifiers, gave rise to the Ichthytosians on the oceanic world of Trilar. The Ichthytosians were, unfortunately, not at all what the Antarans wanted — they became very creative, peaceful, artistic creatures who sought to develop their own culture rather than fight. This century-long endeavor was dismissed as failure in 6311 GC, and the newly evolved Ichthytosians were left alone on Trilar.

Historical Note: Ironically, had the Antarans waited another two centuries, they would have seen the perfect manifestation of their goals. The Ichthytosians advanced swiftly, achieving many advanced technological breakthroughs, and then went through a brutal civil war that destroyed everything they had created in their rapid rise to sentience and power. This War of the Depths lasted for over a century, and in the end, the ruling faction exiled the rebels to the surface of Trilar, a punishment worse than death for the aquatic species. The rebels, trapped in aquadomes built on the few land masses Trilar possessed, felt that there was only one way to escape their eternal imprisonment: evolve from an aquatic species into an amphibian one. The exiles used many radical, dangerous and often untested bioengineering processes to try and change themselves into amphibians. Finally, after a century of lethal experimentation, they succeeded, and the first Saurians were made. They called themselves the Sakkra, and their goals were what the Antarans had programmed them for: conquest and domination. The Sakkra built several colony ships and left Trilar, seeking a new world to call home. This home would be Sssla, located deep within the Orion Sector.

Historical Note: The Saurian experiments did not all end in death. One group of volunteers survived the testing, but instead of changing from aquatic to amphibian, they became something even more ambiguous and amorphous, beings without true form, but capable of replicating other forms that they encountered. The researchers were horrified by the things, and cast the whole lot of them out into space to drift and vanish. These metashifters, trapped in suspended animation, traveled for a long time before their ship piloted itself to a distant habitable world. Once free, they suffered a cultural depression (rejected by those who were themselves rejected from their home; what was their place in the universe?) that led to a psychological shift to vindictiveness: if this was how they were seen, then they would make sure that they earned that reputation. They developed their shapeshifting abilities to mimic any creature flawlessly, mimicking bodies and voices with impeccable precision. Thus was born the Darlok Empire, one of the most feared and mistrusted races in the Orion Sector.

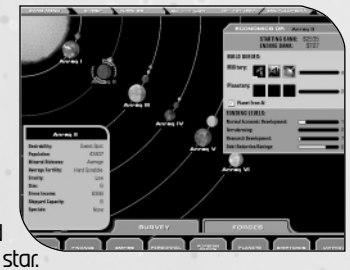
THE ETHEREAN PROJECT

The Antarans targeted native life forms within the imprisoned Antaran Sector for the Etherean project, which was supposed to engineer a slave race that could harvest resources from gas giants. Once again, the century-long project failed to give the Antarans the satisfactory results that they wanted — the Ethereans were not the ideal manufacturers that they should have been, and chose to simply float through the gas worlds and develop at their own pace. The Antarans were tempted to exterminate the lot, but that was seen as too much effort for a species that would not offer much of a challenge or threat anytime soon. The Etherean herds were left to their own devices. However, when the Antarans developed the technology to terraform gas giants into usable worlds, the Ethereans took action, stealing an old dimensional portal and throwing themselves through it. They emerged in the Orion Sector, in 6599 GC, took up residence in several gas giants, and continued on with their peaceful development and evolution.

Historical Note: There are no more Ethereans left in the Antaran Sector. The success of the gas giant terraforming project was such that the Hegemony ordered every available gas giant converted to a more usable form. The last herd of Antaran Ethereans were wiped out in 9641 GC. Those who fled to the Orion Sector eventually split into two separate races, the Eoladi and the Imsaeis, and colonized many of the Orion Sector's gas giants during the Long Night. Their violent opposition to gas giant terraforming technology led them to launch sabotage operations against the local Orion races when they too came upon this knowledge at the end of the second Orion civil war.

CHAPTER FOUR: SYSTEM VIEW

THE SYSTEM SURVEY SCREEN



When you select a Star System from the Galaxy Map (double-clicking on the star), it will zoom in to a view of the current Star System. The Sun appears in the top left corner of the screen with all associated planets and moons fanning out diagonally to the bottom right corner.

The planets and their moons are lined up diagonally in orbit order from their star. This view shows the "gestalt level" of information about the solar system and its planets (their habitability, colonization status, and so forth).

To back out to the Galaxy Map at any time, double-click on the Sun icon or press the minus [-] or Esc key.

Click on a planet to get additional details about it. Note that you can't click on the moons because they can't be colonized directly. Their habitability and minerals, however, are taken into account when you look at the associated planet, as follows (see the Planet Screen description for more details):

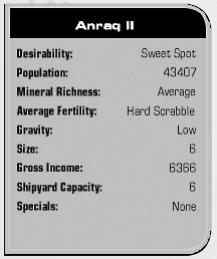
- **Mineral Efficiency —** Bonus to mineral extraction based on the moon's resources.
- **Bioharvest Efficiency —** Bonus to food production (bioharvesting) based on the moon's resources.
- **Maximum Population —** Additional living space on moons that are suitable for your race.
- **DEA Output —** Industrial benefits from the larger population.

Dynamic zooming continues right down to the Planet screen. Double-click any of your planets on the System screen. The view zooms in on the planet and various detailed information display panels become available. See the description of the Planet screen for more details.

Planets that contain a deployment center and/or the Empire seat will have that Empire's flag next to them. In addition, if the planet or its moons contain specials, icons representing them will also be next to that planet.

PLANET OVERVIEW PANEL

You can select a planet and get information on it by simply clicking on it; an info box tells you all you need to know about the currently selected planet.



NAME

Name of planet expressed as name of star followed by Roman numeral describing the orbit number (Altair IV is the planet in the fourth orbit of the solar system containing the star Altair)

DESIRABILITY

Habitability ring of this planet ("1" is better than "2):

Red 1 & Red 2	Population can only exist in Biodomes. Population per region of the planet plus any technology advancements that may improve this. No farming allowed until Achievements permit it. Building Maintenance is +100%.
Yellow 1 & Yellow 2	The population can live exposed to the atmosphere but will require a breathing apparatus. The maximum population is 40-50% that of the equivalent-sized ideal homeworld. No farming on Yellow 2 is allowed until Achievements permit it. Building Maintenance is +50%.
Green 1 & Green 2	Population can breathe the atmosphere, with some difficulty on Green 2. The maximum population is 70-85% that of the equivalent-sized ideal homeworld. Building maintenance costs at this level and better are normal.
"Sweet Spot"	Optimal. Roughly same conditions as species homeworld.
Paradise	Ideal environment for species, with all regions perfectly terraformed. Maximum population is 120% of normal.

POPULATION

Number of population points on the planet. Population points are required to run all economic buildings that increase the capacity (size) of a DEA. A new colony starts with a single population point. Outposts have only a tenth of a point. The maximum population is shown on the Planet screen.

MINERAL RICHNESS

This factor will have one of the following values:

Very Poor	Minimal mine productivity
Poor	Better but still very low
Average	Baseline
Rich	Almost twice as good as Average
Very Rich	Almost three times as good as Average
Ultra Rich	Almost four times as good as Average

Planets surrounding younger stars will tend to have greater mineral richness. Mineral Richness affects mineral production, value of rare minerals, and gravity. Actual production levels of minerals are also affected by the terrain.

AVERAGE FERTILITY

Fertility is based on the habitability zone and the ecosystem density (how many plants and animals live there), and affects food production and the population growth rate. This value represents the average of the fertility levels of each region of the planet. Higher-density planets are more fertile.

GRAVITY

The gravity level of the planet. There are 5 levels of gravity a planet can have; Crushing, Heavy, Average, Light, and Nil. Each species has an ideal gravity that they prefer. At that ideal gravity the species receives 100% output from all of their DEAs. Gravity that is different from this ideal reduces the output by 25% or 50% depending on how much the gravity diverges from that species' ideal.

Gravity is based on the size of the planet and its mineral richness. It affects the output of all DEAs on the planet.

PLANET SIZE

A number ranging from 1-12 indicating the size of the planet. This is the number of "regions" available for the creation of DEAs and therefore various structures on the planet. Earth is roughly a size 6 on this scale, and Jupiter a size 12.

GROSS INCOME

Income of the planet in AUs, before expenses.

SHIPYARD CAPACITY

Largest hull size that can be built using the shipyards located around this planet.

SPECIALS

A list of any planetary and regional specials that exist on the planet.

MOONS

Although you can't look directly at the information for a planet's moons, you will notice that planets with habitable moons are more appealing than those without them. This is because several key attributes of a planet are modified by the presence of moons, as follows:

Mineral Efficiency	If the moons have better minerals than the planet, it is assumed that mines will be placed there instead. The bonus is based on how much better they are, adjusted for the moon's gravity.
Bioharvest Efficiency	If the moons have better food production regions than the planet, it is assumed that bioharvesting DEAs will be placed there instead. The bonus is based on how much better they are, adjusted for the moon's gravity.
Maximum Population	Moons offer more living space, though travel to and from moons is obviously more complex than travel to the next town. The additional living space on moons that are suitable for your race is added to the total for the planet.
DEA Output	Factors in the benefits of the larger population in increasing the efficiency of manufacturing and bioharvesting anywhere on the planet.

These factors are not shown individually. Their values are incorporated into the statistics shown for the planet on the System screen and Planet screen.

PLANET ECONOMICS PANEL

To see how the selected planet's economy is faring, check out the Economics panel.

STARTING BANK

AUs in the planet's bank at the start of this turn.

ENDING BANK

AUs remaining in the planet's bank after this turn's income is added and expenses are subtracted. More details on how these numbers are derived can be obtained on the Planet screen.

BUILD QUEUES

These two sets of icons show items that are slated to be built by this planet. Money that has been allocated for construction is allocated to each item in the queue, starting with the one at the left. If enough AUs are available to build more than one item in a turn, funds are allocated to additional items until all funds are used up or all items are built. Any unused funds go back into your planetary bank.

Some items may require more than one turn to build. In this case, they will remain in the queue until they are completed. In addition, if not all funds are used up by items that require multiple turns, other items can and will be built in the same turn. This prevents big items from "clogging up" the production queues. You can find out the number of turns required to complete a given item by examining the build queue on the Planet screen. The green bar at the bottom shows current progress of the item.

The bar graph to the right of the build queue shows the percentage of your current-turn spending limit that is being applied to this queue (the spending limit is the money in your bank plus current turn taxable income).

You can double-click or right-click any item in the queue to delete it. If you do this, you lose all of the money spent on that item. You can click on and drag items around in the queue to change the order in which they will be built.

Military
The Military Build Queue manages items such as ships, orbitals, ground troops, deployment centers, and planetary defense installations. It also includes structures that which are used to improve the construction of military items (such as buildings that increase hull sizes, for example).

If money has been allocated at the Empire level via Military Grants, it will be spent this turn. This means that military items may be completed sooner than the estimated time would suggest. These grants also include money to pay for any additional pollution caused by the increased military spending.

Planetary
The Planetary Build Queue manages buildings that have planet-wide effect (and therefore can be built only once on each planet). These are all listed on the Planetary Infrastructure panel of the Planet screen. The System Seat and Imperial Seat of Government are also built via this queue.

Economics
Your planetary viceroy handles some construction tasks without informing you of the details. All DEAs and buildings within DEAs are constructed based on the budget that you set with the Econ slider on the Planet screen (or that your viceroy sets on your behalf). The status of these items can be viewed on the Planetary Infrastructure ppanel of the Planet screen, though you will not normally need to be concerned with planetary operations at this level of detail.

Planet Econ AI
This check-box allows you to either delegate day-to-day operation of the planet to your planetary viceroy, or to take a more active role in managing every aspect of the planet's operations each turn. If checked, the viceroy will obey your Regional Zoning and development plan requests (as specified on the Empire screen) and your DEA zoning requests (as specified on the Economics panel of the Planet screen) but otherwise will operate without your assistance, building items, assigning DEAs, and so on.

If the box is unchecked, the viceroy will let you decide which DEAs are to be built, and which Planetary or Military items go into the Build Queue. Additionally, your viceroy will not make any adjustments to the budget sliders on the Economics panel of the Planet screen.

Note: Even when you've checked the Planet Econ AI box, you can still make changes to the build queues, DEA zoning, tax rates, spending sliders, and planet classifications, and your planetary viceroy will attempt to take your requests into account. If you have adjusted the sliders, the AI will initially leave them alone, but will gradually take over control over a span of 10 to 20 turns.

FUNDING LEVELS

This panel summarizes the main economic settings for the planet, which can be adjusted using the Economics panel on the Planet screen. Each bar shows the percentage of the current spending limit that is being devoted to the designated aspect of your planet's operation. The colors of the bars represent efficiency in production of each given item; the more you spend, the less efficient you will be, and therefore the less you will get for your additional AUs. The colors are as follows:

Green	1 to 1 (maximum efficiency)
Yellow	2 to 1
Bright Orange	3 to 1
Dark Orange	4 to 1
Bright Red	5 to 1
Dark Red	6 to 1 (lowest efficiency)

The first three sliders (Military, Planetary, Normal Economic Development) share the same industry base, and the AUs used by the above sliders to produce production points all create additional pollution. The pollution budget is built into the slider setting, If the slider says you've allocated 226 AUs to Normal

Economic Development, you're actually getting somewhat less because pollution mitigation is taking some of those funds away.

Normal Economic Development
This represents the construction of all normal economically related entities on the planet, such as DEAs, buildings, and so on. Any excess funds are returned to the planetary bank.

Terraforming
This represents the funds allocated to terraforming the planet (and therefore moving its habitability closer to the "sweet spot"). Note that terraforming depends on certain technological achievements. Until these items are researched successfully, you cannot terraform your planets.

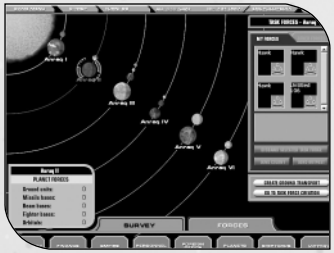
The number of researched terraforming achievements determines both the maximum number of habitability rings a planet can be terraformed and the cost of terraforming. Certain advanced terraforming achievements allow planets to be terraformed to the best habitability (paradise) for their species.

Any planet that has been terraformed pays maintenance to keep it at that terraforming level. If a planet can't pay terraforming maintenance, it will begin to slide back toward its original habitability. Even if a planet that has been terraformed in the wrong direction is captured, you still pay the full maintenance. In this case, however, that maintenance, instead of keeping the planet terraformed in the previous direction, actually helps move the planet to a more favorable habitability.

Research Development
This represents funding of research (producing Research Points, or RPs). The color will change depending on the efficiency of the research efforts.

Debt Reduction/Savings
This is the amount of money that's left over after spending, which will be used to reduce debt and increase savings in the planetary bank.

THE SYSTEM FORCE SCREEN



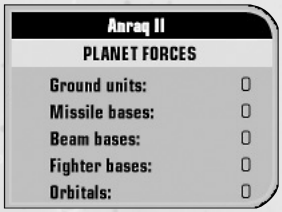
To get a status on what Military units have been deployed to a certain planet, click on the Forces tab at the bottom of the System Survey screen.

PLANET FORCES PANEL

The Planet Forces panel gives you a quick summary of what units are located at the selected planet.

GROUND UNITS

Sum of the numbers of all friendly army units ("grunts") on the planet (from soldiers to battleoids).



MISSILE BASES

Number of operational missile bases on the planet.

BEAM BASES

Number of operational beam bases on the planet.

FIGHTER BASES

Number of operational fighter bases on the planet.

ORBITALS

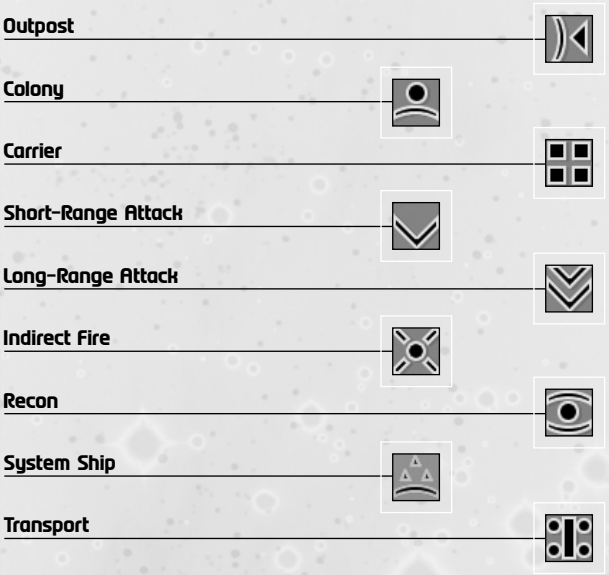
Number of operational orbitals currently protecting this planet from space.

PLANET TASK FORCE PANEL

This panel lets you look at all of the friendly and hostile forces in space around this planet.

Icons are used to show the type of Task Force or System Ship. To enable the Disband button at the bottom of the panel, click on one of the icons. Multiple selections are not allowed in this panel.

The type of the icon indicates the mission of the task force, as follows:



MY FORCES
Shows icons for each Task Force or System Ship of yours in this system.

OTHER FORCES
Shows icons for each Task Force or System Ship in this system that belongs to another player, whether allied or not.

DISBAND SELECTED TASK FORCE
Eliminates the selected Task Force, sending all remaining ships back into the reserves. Note that ships sent to the reserves will usually be offline for a few turns before they are available once more for use in another Task Force.

SEND COLONY
This is a short-cut command that creates a Colony Task Force at the nearest Deployment Center (or finds an existing one that's nearby) and gives it instructions to colonize the selected planet. If no planet is selected, you will be prompted to select one.

SEND OUTPOST
This is a short-cut command that creates an Outpost Task Force at the nearest Deployment Center (or finds an existing one that's nearby) and gives it instructions to place an outpost on the selected planet. If no planet is selected, you will be prompted to select one.

CREATE GROUND TRANSPORT BUTTON
Clicking this button will take you to the Ground Forces Assembly screen. Note that, once you've created the Ground Force, you'll then be taken to the Task Force screen, since you'll need to create the ships that will move them to the desired destination.

GO TO TASK FORCE CREATION BUTTON
Clicking this button will take you to the Ship Task Force Assembly screen. Note that, once you've created the Ground Force, you'll then be taken to the Task Force screen, since you'll need to create the ships which will move them to the desired destination.

STARS AND PLANETS

Stars are connected with lanes that can be traveled, though you'll only see the ones you've discovered. Initially, that means you'll probably see two or three lanes leading from your star to its neighbors. If you're on one of the arms of the galaxy, you'll probably have fewer neighbors nearby. That makes for fewer potential enemies, but also fewer easy places to explore and expand.

When you double-click a star, the view zooms in to the star and, as the view gets tighter, you can see the Planets and their associated moons in orbit around that star. This is known as the System screen. By clicking on the Star (or pressing the ESC key) you can transition back out one level to the previous screen until you're back at the Galaxy Map again.

STAR LANES
As outlined earlier, Star Lanes represent "highways in the sky" that your spaceships and fleets can utilize while exploring the galaxy. The advantages to Star Lanes are threefold — they can get you from point A to point B rather quickly, they can be upgraded through technology to propel your fleets even faster and they can be used to create choke points at key star systems in your empire. Star Lanes are marked on the map as Blue or White lines connecting two stars.

FLEETS

Any ship or group of ships you have control of is indicated on the map by a tiny ship icon in your Imperial Color. If you somehow know the current location of another race's fleet, it's shown, too, but in that Empire's color. You can click on any displayed fleet to get information about it or — in the case of your ships at certain times — give orders. The location of each icon tells you something about it. If it's between star systems, then it is en route to somewhere. Icons sitting **above and to the *right*** of a star are considered to be in orbit around a planet in that system. Icons sitting **above and to the *left*** of a star have been given movement orders and will no longer be located at that star as soon as the turn is completed.

TRAVEL LINES

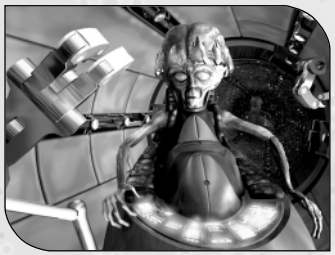
When any of your space fleets are in transit, a broken line marks the space between the ships and their destination. Near the fleet is a tiny number — the remaining travel time in turns. If you somehow know the destination of another race's fleet, that is displayed as well.

WORMHOLES

These bizarre spatial anomalies are thought to be created when two black holes collide at unimaginably high velocity and turn each other inside out. Somehow, the interaction of the singularity regions "pinches" two distant points in hyperspace together. Regardless of the cause, the effect is clear; any ship can travel from one end of a stable wormhole to the other in just a single turn, no matter what the distance. Wormholes are marked on the map as Green lines connecting two points.

THE ORION SECTOR PART V

THE NEW MASTERS OF ORION AND THE ORION CIVIL WAR



Circa 8200 GC, during an exceptionally long period of hyperspace stability, several young races in the Orion Sector discovered the basic concepts of FTL technology. Interestingly, most of these races were by-products of genetic manipulations, with the exception of the Meklars and the Silicoids. As they branched out, they came into contact with one another, and much as had happened before, differences became suspicions, and suspicions became hostilities, and hostilities became warfare. Despite the establishment of a centralized political body that they called The Orion Senate (named after the mysterious Orion star system at the center of the sector, which no ship had ever explored due to the presence of a powerful but unidentifiable battleship that protected the system), the young local Orion races soon found themselves enmeshed in a brutal and bloody war for territory within a small region of space around Orion itself (their view of the Orion "sector" was significantly smaller than what the sector's area had been at the height of the Orion League's power). The 300-cycle long conflict was eventually ended by the Humans, who had, through shady diplomacy and brute force, managed to subdue their galactic neighbors one by one until they all stood grudgingly behind them and elected them to the Presidency of the Senate.

The Pax Humanica

The Humans united the Orion Sector under the banner of the Pax Humanica, preaching the onset of an "age of enlightenment," in an effort to bring about a harmony among all peoples. This led to many positive effects — a focus on making all colonies self-supporting so as not to rely on hyperspace and FTL-transported supplies, the promotion of trade within the boundaries of the Pax Humanica, and a devotion to culture and the arts that led to many great works being created by all races.

The negatives to these developments included a lack of focus on scientific research, a reduced drive for expansion, with population control methods strictly enforced, and a tyrannical policy of insisting that all conformed to the "utopian" views of the Pax Humanica. The fascistic Humans ruled the Orion Sector with zero tolerance for aberrant behavior, monitoring and controlling the citizenry with brute-squad tactics. As a result, though the Pax lasted for almost 10,000 cycles, the civilizations within the Orion Sector did not expand much at all, whether territorially, militarily, or scientifically. A large part of this was due to the hyperspace flux that continued to hamper FTL travel, but the "artistic" progress toward a "utopian" society led to nothing but stagnation and Humanocentric socio-political elitism. Unbeknownst to them, the Antaran Hegemony was making constant strides forward in their ruthless goal to be masters of their domain. Even as the Pax Humanica restricted FTL travel due to the unsafe nature of hyperspace, the Antarans were studying ways of using wormholes to exceed hyperspace's limitations.

This stagnation might have continued were it not for the fact that the Long Night finally ended. Ironically, the Pax Humanica barely noticed, having limited FTL travel so much that very few ever used it at all. However, pirates and traders and merchants all gambled with hyperspace constantly, and soon realized that the disruptions were all but gone. Their discovery was kept secret for their own profit, but idle gossip and boasting soon filled the ears of both the Pax Humanica empires and others nearby. Those other civilizations bordering the Orion Sector had developed to the point where FTL travel became a possibility, and some, having heard about the Pax Humanica from various travelers, sought to colonize within their borders. Elerians, Gnolams, and Trilarians entered Orion space with the same intent that all the younger races once had: expansion of their empires.

Historical Note: The Evon also appeared nearby at this time, deposited there by Mizara colony ships. The Mizara had eventually developed the technology needed to genetically manipulate and engineer local races within their space, even as the Orions and Antarans had done. The Mizara, however, engineered a race for the purpose of scouting the galaxy and searching for the "threat" of Center One descendants. Their function was to colonize and expand and explore the galaxy in the name of their "gods," who had given them this divine mandate. Hundreds of colony ships loaded with Evon colonists and primitive technology (by Mizaran standards) were launched across the galaxy between 3000 GC and 3500 GC in search of habitable worlds to colonize. The Mizara could thus focus on expanding their local borders (still a gradual process due to the Long Night effect) and developing their own empire and resources for their great war: vengeance against Center One's descendants. When they expanded and came to a region of space that the Evon had dominated, it made it easier for them to assimilate that sector into their domain. When they came to a region of space where the Evon had been dominated, they knew that a potential threat existed there, and could concentrate more fully on securing that region through force.

Historical Note: Mizara and Polarid expansion in the Galactic Core had eventually brought them into contact with each other. The Polarids had, by some incredible stroke of luck, settled in a system with a wormhole nexus similar to that which had orbited Center One, but far more stable and reliable. As a result, the Polarids survived and prospered during the Long Night, for travel through wormholes was not blocked, and their home system contained over a dozen wormhole endpoints. They managed to expand into a sizeable empire, and advanced quickly in the field of Wormhole Physics. Upon making contact with the hostile Mizara around 3900 GC, they began amassing their forces in threatened systems while launching an immense intelligence gathering operation. The Polarids learned of how the Mizara were using the Evon as advance scouts, and proposed their own project, the construction of an "Evon Killer" race, in response. It took several tries to succeed, and the Polarids dispatched many of their failed versions through a one-way wormhole that they had created. The endpoint of that wormhole was deep in the Orion Sector, and those failed "Evon Killers" ended up colonizing the first planet they found. They called themselves Humans, and would one day use the cunning and ruthless instincts the Polarids had instilled in them to dominate the Orion Sector. The Polarids themselves finally succeeded in breeding what they felt was the ideal hunter-killer race, whom they called the Varakesh, and around 8500 GC began dispatching their own colonists throughout the galaxy on a search for the Evon.

CHAPTER FIVE: PLANET VIEW

The Planet screen lets you look in detail at the status of your planet and make changes as you see fit. Normally, your planetary viceroy will handle the day-to-day operation of the planet, leaving you to concentrate on the larger challenges of running the empire. But you can come here as much as you'd like and make recommendations about how the planet should be run.

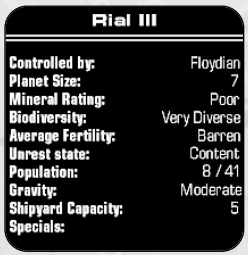
This chapter shows you how to take advantage of your many options on the Planet screen.

UNIVALUE RING

This scale (represented by a circle around the planet) shows the relative development of that planet by the civilization that controls it, based on that civilization's maximum technological abilities in the areas of economic development, environmental development, population size, and military defense. This allows players to make a quick "apples to apples" type comparison of planets at a glance and is very useful for high-level planning. Essentially, the greater a planet's univalue, the juicier a target it is (and the more its owner should protect it).

PLANET INFORMATION PANEL

This panel gives the basic overview of the selected planet.



NAME

Name of planet expressed as name of star followed by Roman numeral describing the orbit number (Altair IV is the planet in the fourth orbit of the solar system containing the star Altair).

CONTROLLED BY

This shows the dominant race on the planet. There may be several if the planet was captured from one empire by another, or if forced labor units (FLUs) are located on the planet.

PLANET SIZE

A number ranging from 1-12 indicating the size of the planet. This is the number of "regions" available for the creation of DEAs and therefore various structures on the planet. Earth is roughly a size 6 on this scale, and Jupiter a size 12.

MINERAL RATING

A measure of the abundance of heavy elements making up the composition of the planet. This (along with terrain) affects the output of mines and the amount of AUs generated from rare mineral byproducts, as well as the gravity level on the planet. Mineral Rating tends to be greater on planets orbiting young solar systems, because their stars have been formed from the remnants of supernovas, which typically include large quantities of heavier atoms. The Mineral Rating has six levels; Ultra Rich, Very Rich, Rich, Average, Poor, and Very Poor.

BIODIVERSITY

A measure of the diversity of the biomass of the planet. Biodiversity has five levels; Very Diverse, Diverse, Heterogeneous, Homogeneous, and Very Homogeneous. Biodiversity tends to be greater with older solar systems. Biodiversity affects the regional ecosystem density of the planet and the amount of AUs generated from rare bioharvest byproducts. Greater diversity leads to greater bioharvest productivity.

AVERAGE FERTILITY

Fertility is based on the habitability zone and the ecosystem density, and affects food production and the population growth rate. This value represents the average of the fertility levels of each region of the planet.

POPULATION

Number of population points on the planet. Population points are required to run all economic buildings that increase the capacity (size) of a DEA.

GRAVITY

The gravity level of the planet. There are five levels of gravity a planet can have; Crushing, Heavy, Average, Light, and Nil. Each species has an ideal preferred gravity. At that ideal gravity the species receives 100% output from all of their DEAs. Gravity that is different from this ideal reduces the output by 25% or 50% depending on how much the gravity diverges from that ideal.

SPECIALS

A list of any planetary and regional specials that exist on the planet.

ICONS

FOOD

Output of bioharvest DEAs and some population. Needed by most species as nourishment and later consumed by factories. The numbers show the amount of food the planet produces, the amount of food the planet wants to consume, and how much of any shortfall is being met by excess food from other planets. Most population consumes food at the rate of one food per population point. Population points getting less than this amount will grow more slowly and have more unrest down to 50% of normal food requirements. At 50% of normal consumption rate there is no population growth. Below 50% of normal food requirements the population starts dying off.

MINERALS

Output of mines and some population. Needed by some species as nourishment and consumed by factories. The numbers show the amount of minerals the planet produces, the amount of minerals the planet wants to consume, and how much of any shortfall is being met by excess minerals from other planets. The factory consumption rate (mineral amount needed per 10 Industry) is reduced over time with Achievements.

INDUSTRY

Output of factories and population. Industry is a measure of the operating potential of the planet's industry. It acts as a funnel to determine the final cost of creating Production Points (PPs). For example, if a planet has 50 Industry, then the cost of the first 50 PPs would be 1 AU per PP. Any additional PPs produced would have a greater cost (the industry is being overdriven and is therefore less efficient) up to 100 PPs. Additional PPs produced above 100 would have an even greater cost with the cost increasing again at each multiple of 50. Note that you can research some technological advancements that will reduce this effect.

PRODUCTION POINTS

This determines how much funded manufacturing the planet is doing. The cost of building any structure is expressed in Production Points.

TEST TUBES

Output of research DEAs and population. It is a measure of the research potential of the planet. The Test Tube amount determines the cost of making Research Points (RPs) like Industry does for Production Points.

RESEARCH POINTS

This determines how much funded research the planet is doing. The cost of any research project is expressed in Research Points (RPs). Grants from the Empire level can supplement this, if desired.

PLANETARY INFRASTRUCTURE PANEL

This panel gives you a detailed look at the layout of each region on the planet. It shows the terrain and DEAs that are currently there. You can use this information to help decide what to do with this planet, and then set up your development plans by zoning various regions for specific DEAs that your planetary viceroy can build. Or, you can let the viceroy make the decisions for you by simply leaving the regions unzoned.

PLANETARY BUILDINGS

Some buildings affect the entire planet. These are called Planetary Buildings and are shown at the top of the list. At the start of the game, you'll see only a few items here. As the planet develops, however, you'll see a wide variety of buildings here, ranging from defense installations to universities to planetary supercomputers.

REGION INFORMATION

Next to the region number you'll see several indicators that describe the characteristics of this region. First is the terrain, which can be either Mountain, Broken or Plains. Next is the Ecosystem Density, which represents the amount of living material (flora and fauna) found in this region. The higher the Density, the higher the fertility of the region and the higher the population density. Third is the Fertility, which ranges from Lush (the best) to Toxic.

DOMINANT ECONOMIC ACTIVITIES (DEA)

Dominant Economic Activities (DEA) let you determine the economic zoning of the planet. Each region of the planet can support 2 DEAs and one spaceport DEA. Your planetary viceroy will automatically create new DEAs, as needed, based on the development policies that you have established. But you can also set up your own, if you desire.

Bioharvest DEA

This DEA produces Food (base efficiency of DEA modified by regional fertility and terrain) and AUs from rare bioharvest byproducts (modified by food production and biodiversity). This DEA requires a moderate population to run.

Mining DEA

This DEA produces Minerals (base efficiency of DEA modified by the planetary mineral richness and regional terrain) and AUs from rare mineral byproducts (like gold and gems). This DEA requires a low population to run.

Industry DEA

This DEA's potential is measured in Industry (which allows and controls the cost of making production points) and generates AUs. This DEA requires a high population to run.

Research DEA

This DEA's potential is measured in Test Tubes (which allows and controls the cost of making research points). This DEA requires a low amount of population to run.

Government DEA

This DEA has two effects. 1) Increases the efficiency of taxation and regional economic infrastructure, and 2) Reduces unrest. A government DEA's sphere of influence depends on which seat of government is located there. For an empire seat, this influence can extend all the way out to adjacent solar systems. This DEA requires a high population to run.

GAMER TIP: During land combat, the attackers gain control of the planet when the last Government DEA falls, so place more than one government DEA on important planets in order to make them more resistant to ground assaults.

Military DEA
This DEA influences two areas. 1) Increases the stacking limit of military buildings and orbitals on the planet. 2) Increases the amount of unrest reduction. Unrest reduction has an outreach effect. This DEA requires a moderate population to run.

Recreation DEA
This DEA increases the happiness of the population by reducing unrest. It also generates AUs from tourism if there is a spaceport in the same region. Both of the recreation influences have an outreach effect that can extend out to adjacent solar systems. This DEA requires a moderate population to run.

Spaceport DEA
This DEA allows trade to occur with other Spaceport DEAs. Trade generates revenue that can be taxed. Like fax machines, the more Spaceports that are in existence, the more useful they become.

Trade is broken up into three types depending on the distance between the Spaceport DEAs that are generating the trade. Trade between Spaceports on the same planet is called Commuter Trade, and this revenue is added to the planet's GDP. Trade between Spaceports on different planets within the same solar system is called local or system trade.

Trade between Spaceports in different solar systems is called interstellar trade. Local and interstellar trade revenue shows up in the trade category. Interstellar trade has an outreach effect that varies with the capacity of the spaceport DEA. Late in the game, a DEA can trade with DEAs in solar systems four jumps away. This DEA requires a low population to run but has prerequisite regional population levels needed to be able to build the DEA and to upgrade its capacity.

TERRAIN
This represents the type of terrain each section of the planet falls into. The type of terrain modifies the output of both Farming and Mining.

Plains
Relatively flat area with lots of loose material at the surface. Well suited for farming by most species. Poorly suited for mining.

Mountains
Very uneven area with lots of exposed rock at the surface. Well suited for mining. Well suited for farming by some species and poorly suited for the rest.

Broken
In between Plains and Mountains. Average suitability for either farming or mining.

PLANET ECONOMICS PANEL IN DETAIL

The Economics panel shows the following summary information to assist you in understanding what the planet is doing each turn, measured in Antaran Units (AUs).

REVENUE DETAILS
- **GDP Local:** Gross Domestic Product. Total amount of pre-tax AUs generated by the planet, before accounting for trade.
- **Tax Income:** Amount of GDP retained for the planet's use.
- **Trade:** AUs generated through taxation on interplanetary and interstellar trade.
- **Grants:** AUs given to the planet from the empire's bank.

INCOME:
Sum of all four of the above sources of income.

EXPENSE DETAILS
- **Production:** Total AUs allocated by the Build Queues and the Funding Level sliders at the bottom of this panel.
- **Maintenance:** Total AUs needed to maintain buildings and ground forces on the planet, plus the cost of maintaining the current Terraforming level. This is based on what has been built previously on the planet and is not affected by the sliders.
- **Pollution:** Total AUs needed to clean up the pollution generated by building things. This number is affected by the Military and Planetary Build Queues and by the Normal Economic Development slider.

EXPENSES:
Sum of all three of the above expense categories.

STARTING BANK:
AUs in the planet's bank at the start of this turn.

ENDING BANK:
AUs remaining in the planet's bank after this turn's income is added and expenses are subtracted.

INCOME SOURCES
This section shows the layout of the DEAs (Dominant Economic Activities) on the planet. Icons with a "B" represent DEAs that have been built, and those with an "IP" represent those currently in progress. You can change these selections by going to the Planetary Infrastructure panel at the right of this screen. DEAs that may appear include Farming (Bioharvesting), Mining, Industry, Research, Government, Military, Recreation, and Spaceport.

PLANET ECON AI

This check-box allows you to either delegate day-to-day operation of the planet to your planetary viceroy, or to take a more active role in managing every aspect of the planet's operations each turn. If checked, the viceroy will obey your Regional Zoning and development plan requests (as specified on the Empire screen) and your DEA zoning requests (as specified on the Planetary Infrastructure panel of the Planet screen) but otherwise will operate without your assistance, building items, assigning DEAs, and so on.

If this box is unchecked, the viceroy will let you decide which DEAs are to be built, and which Planetary or Military items go into the Build Queue. Additionally, your viceroy will not make any adjustments to the budget sliders on the Economics panel of the Planet screen.

Note: Even when you've checked the Planet Econ AI box, you can still make changes to the build queues, DEA zoning, tax rates, spending sliders, and planet classifications, and your planetary viceroy will attempt to take your requests into account. If you have adjusted the sliders, the AI will initially leave them alone, but will gradually take over control over a span of 10 to 20 turns.

TAX RATE

Determines the percentage of the planet's GDP and Trade available for spending.

GAMER TIP: Higher taxation levels can increase unrest. Each combination of species and government type has a different level of tolerance for the tax rate, so you'll need to look closely at your own empire to determine the best setting for this control.

BUILD QUEUES

These two sets of icons show items that are slated to be built by this planet. Money that has been budgeted for construction is allocated to each item in the queue, starting with the one at the left. If enough AUs are available to build more than one item in a turn, funds are allocated to additional items until all funds are used up or all items are built. Any unused funds go back into your planetary bank.

Some items may require more than one turn to build. In this case, they will remain in the queue until they are completed. In addition, if not all funds are used up by items that require multiple turns, other items can and will be built in the same turn. This prevents big items from "clogging up" the production queues. The number of turns required to complete a given item is shown here.

The bar graph to the right of the build queue shows the percentage of your current-turn spending limit that is being applied to this queue (the spending limit is the money in your bank plus current-turn taxable income).

Note: Money does not build items directly. Rather, it goes toward the creation of Production Points (PPs), which are in turn applied toward construction of items.

You can double-click or right-click any item in the queue to delete it. If you do this, you lose all of the money spent on that item. You can click on and drag items around in the queue to change the order in which they will be built.

Build Queue Subpanel

To change the items in the queue, click on the button to the right of the slider. This will pop up a subpanel showing the current items in the queue, details of any selected item, and a list of potential items that you may build at this time. Click on any item in the queue to find out more information about it. The button at the lower right will say "Scrap." Click this, or simply double-click the icon in the queue, in order to remove the item from the queue.

Double-click on any item in the list of Available Items to add that item to the queue, if there's room. Or, just select the item and click the Build button at the bottom of the panel.

In order to close it, click a second time on the button that opened this subpanel.

Military

The Military Build Queue manages items such as ships, orbitals, ground troops, deployment centers, and planetary defense installations. It also includes any structures that are used to improve the construction of military items (such as buildings that increase hull sizes, for example).

If money has been allocated at the Empire level via Military Grants, it will be spent this turn. This means that military items may get done sooner than the estimated time would suggest. These grants also include enough money to pay for any additional pollution caused by the increased military spending.

Planetary

The Planetary Build Queue manages buildings that have planet-wide effect (and therefore can be build only once on each planet). These are all listed on the Planetary Infrastructure panel of the Planet screen. The System Seat and Imperial Seat of Government are also built via this queue.

Economics

Your planetary viceroy handles some construction tasks and will inform you of the details. All DEAs and buildings within DEAs are constructed based on the budget that you set with the Econ slider on the Planet screen (or that your viceroy sets on your behalf). The status of these items can be viewed on the Planetary Infrastructure panel of the Planet screen.

FUNDING LEVELS

This section lets you modify the main economic policies for this planet.

Each slider adjusts the percentage of the current spending limit that is being devoted to the designated aspect of your planet's operation. The colors of the bars represent efficiency in production of each given item (see chart on page 49); the more you spend, the less efficient you will be, and therefore the less you will get for your additional AUs.

Note that you can obtain technologies that reduce the losses from overdriving your economy, but those are not yet in effect at the start of the game. Driving your economy at 6:1 will be highly impractical at the start of the game, but it may be more viable later. However, keep in mind that overdriving your production will also generate a lot of pollution, which may contribute to unrest.

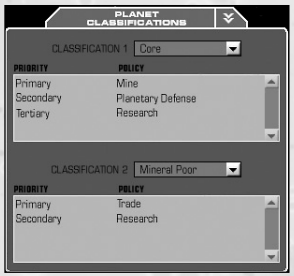
The Normal Economic Development, Terraforming and Research sliders all contribute to pollution. The pollution budget is built into the slider setting automatically, This means that if the slider says you've allocated 226 AUs to Normal Economic Development, you're actually getting somewhat less because pollution mitigation is taking some of those funds away.

Normal Economic Development
This slider affects the construction of all normal economically related entities on the planet, such as DEAs, buildings, and so on. Any excess funds are returned to the planetary bank.

Terraforming
This slider affects the cost of terraforming the planet (and therefore moving its habitability closer to the "sweet spot"). Note that terraforming depends on certain technological achievements. Until these items are researched successfully, you cannot terraform your planets.

Research Development
This slider affects funding of research (producing Research Points, or RPs).

PLANETARY CLASSIFICATIONS PANEL

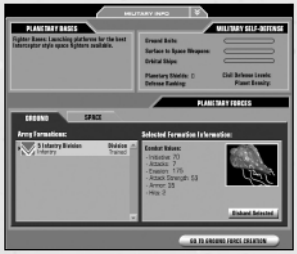


This panel shows the two "classifications" that have been assigned to this planet by the AI or by the player. These can be used as a reminder of the purpose of the planet — "Research Center," for example. But they can also be used in a very powerful and simple way to tell the AI how to best develop the planet.

Development Plans (created on the Development Plans panel of the Empire screen) tell the planetary viceroy what to emphasize on a given planet. For example, you can give high priority to research centers and medium priority to bioharvesting on your research planet, and the AI will favor the construction of those sorts of DEAs and structures.

This panel shows you which two classifications have been assigned to this planet, and also summarizes the effects of any Development Plans that are associated with those classifications.

MILITARY INFO PANEL



This panel summarizes all military activity on the planet.

PLANETARY BASES
This section lists the types of bases on your planet — missile bases, beam bases, and so forth.

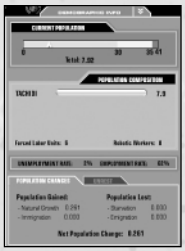
MILITARY SELF DEFENSE
These graphs show the percentage of maximum planetary capacity of the designated item that is currently operational on the planet. The capacity is based on the size of the planet.

PLANETARY FORCES
This section lists all of the forces on or orbiting this planet, along with their missions, strength level, and empire to which they belong. Click on one of the items in the list to see more details displayed on the right-hand side of the panel. You can also click on the small arrow to the left of a Task Force icon to see a list of the ships it contains. Click it again to hide the details.

The type of the icon for a space-based asset indicates the mission of the task force (see chart on page 52). Icons for ground assets are specific to each race.

DEMOGRAPHIC INFO PANEL

CURRENT POPULATION



This bar shows a visual comparison of the current population to the maximum population of the planet. At 75% of the planet's maximum population, the bar is colored yellow. If the current population indicator is in the yellow zone, then some unrest will be caused by overcrowding. At 90% of the planet's maximum population, the bar is colored red. If the current indicator is in the red zone, then significant unrest will be caused by overcrowding. When people become too crowded and are unhappy due to unrest, they will tend to leave and go to other, better planets, if they can be found and reached.

POPULATION COMPOSITION
This shows the racial makeup of the planet's population by using horizontal bars to measure the population of each race. The order of displaying the different races is done from largest on top to the smallest on the bottom. The numbers of forced labor units and robotic workers working in DEAs are also shown here.

UNEMPLOYMENT
Shows the percentage of the planet's population that is currently unemployed. This figure is derived from taking the percentage of the population that is not being directly employed by DEAs and multiplying that by the taxation rate.

POPULATION CHANGES

This panel details the changes in the population of the planet on the most recent turn. Increases are shown for natural growth (i.e. births minus deaths) and for immigration from other worlds. Losses can be from either starvation or emigration to other worlds. Each number shown is measured in Population Points.

The net change for this turn is shown in large numbers at the bottom of this panel.

UNREST

This shows the unrest values on the planet and the three most important reasons for the unrest. This allows you to "zero in" on problem areas and decide how to address them.

Reasons for unrest can vary widely. They range from oppression (too high a setting on the Oppressometer) and overpopulation to excessive taxation levels.

ENVIRONMENT PANEL

The environment of a planet is determined by two primary factors, surface temperature and atmospheric density, and is shown in a two-dimensional matrix called the Habitability Display. The Habitability Display measures increasing temperature moving to the right along the bottom and increasing atmospheric density upward.

PLANETARY TEMPERATURE INDICATORS

	NORMAL PLANETS	GAS GIANT PLANETS
Cold	Gray/white terrain with purple/blue clouds; Purple/blue clouds	May have ice
Warm	Green/brown terrain with white clouds; may have ice caps/water	Green/blue-green clouds
Hot	Brown/yellow terrain yellow clouds and little water	Yellow/brown clouds
Inferno	Orange/red terrain with red/black clouds	Orange/red clouds

ATMOSPHERIC DENSITY INDICATORS

Negligible	No atmosphere
Thin	Light cloud cover
Thick	Heavy cloud cover
Gas Giant	Total cloud cover with weather bands

For example, a Humanoid player would look for a Terran type of planet (warm with a thin atmosphere, like Earth). So that player should keep an eye out for a world with white light cloud cover and covered in green terrain with possibly water and/or ice caps.

ENVIRONMENT DISPLAY

The Environment Display gives two pieces of information:

- Plots the current and original location of the planet's environment.
- Shows the ideal environment of your species with expanding rings (called habitability rings) to show levels of degradation from that ideal.

The Environment Display allows you to quickly measure how favorable the planet's current environment is for your species or for any other player in the game. A planet that is great for you might be terrible for anyone else, and you can often use that to your strategic advantage. You can click on the expansion tab and use the drop-down menu in the Environment Display to view the current planet from the point of view of any species.

Habitability ring determines:

- (With ecosystem density) the fertility of each region
- (With size and ecosystem density) the maximum population per region
- Maintenance cost of buildings on the planet

To see the effect of the habitability rings on the planet, see the chart on page 46.

THE ORION SECTOR PART VI

THE GREAT WAR: ACT ONE — "THE FALL OF THE PAX HUMANICA"

Rumors and gossip by various raiders, merchants, and pirates brought up stories of huge empires beyond the Orion Sector, civilizations that had mastered interstellar travel and warfare, and many other dangers and riches that lay nearby. Soon these stories took root in the people and the old dreams returned: All the stars were there for the taking. One by one, the local Orion races resurrected their old space programs, and the revitalization of the Orion Sector was underway. This blatant rejection of the Pax Humanica's enforced policies was met with strong resistance, but the Humans could not suppress the rediscovered dreams of the local Orion races. In addition, the new "threat" posed by previously unknown races — the Gnolams, who saw profit in this new territory; the Elerians, who sought to test their strength against their neighbors; and the Trilarians, whose homeworld now

rested within the bounds of the dying Pax Humanica — challenged the authority of the Humans. By 17633 GC, the Pax Humanica was no more, as each individual race rejected the Senate's stagnant policies and rose up to claim what was rightfully theirs. Not every race within the sector made itself known; hiding in secret within the Orion Sector's gas giants were the Ethereans, who did not wish to be bothered by the other races' warfare, and developing just beyond the bounds of the Pax Humanica were the Evon colonies.

As the local Orion races rose up and expanded their empires, they again faced conflict with their neighbors over borders and territories. The Orion Senate was convened to maintain diplomatic relations between the growing nations, and trade and discourse flourished even as war fleets were being built nearby.

THE GREAT WAR: ACT TWO — "THE ANTARAN MENACE"

It was inevitable that the drive for territorial expansion would bring the local Orion races into conflict with one another again, and the drums of war were dusted off and sounded throughout the sector. Legends and tales from this war still remain within the historical archives of the local Orion races. Stories of the vast legions of Sakkra, "as numerous as the stars in the sky," or the shadowy Darloks, "the hidden masters of chaos and dissent," or the Mrrshan, "proud and noble warriors" were still remembered thousands of years after the war had ended. Regardless of the literary license taken with the war, it was still a vast and terrific undertaking for all the races involved. Each race arrogantly claimed that it was the rightful master of the Orion Sector, and each race fought to the death to prove themselves right. Though the Evon and the Ethereans did not participate in the conflict, they did observe it from the sidelines, the Evon to prepare, the Ethereans simply to await the potential discovery of gas giant terraforming and take counter-action in such an event.

One other race, however, made itself known during this time period. The first confirmed raid by the Antarans in the Orion Sector took place in 17863 GC. Numerous additional raids followed. At the time, they were seen as nothing more than mysterious raiders who attacked fleets and colonies, seemingly at random, and always destroying everything that they encountered. Their attacks soon came with increasing frequency and brutality, costing all races equally in ships and population. No race was spared a visit by the Antarans, and with each subsequent attack, the local Orion races grew a little more worried, a little more fearful: Who was it who was challenging them, where did they come from, and what did they want?

In the Senate, an intense study was conducted concerning the Antaran menace in 17878 GC. Its results were both disturbing and disheartening. The study correctly concluded that the Antarans were a very ancient race utilizing technologies both unknown and quite superior to those currently in use by the local Orion races. Worse, they were operating not from another sector (against which a counterstrike could be launched), but from another dimension. Somehow, a way would have to be found to invade their dimension if the Antarans were to be dealt with.

In the meantime, the war continued, and the Antarans maintained pressure on the Orion races indiscriminately. Even as they fought amongst themselves, the young Orion races realized that if the war did not end soon, either through political or military means, then the victor would be the Antarans themselves. The unimaginable terrors that implied led the survivors to ever-greater lengths to end the Great War. But no race could gain a serious enough advantage to unite the Orion races. Suspicions and hatreds ran deep. Besides, it was repeatedly argued, uniting against the Antarans was a futile stance while they were safe and inaccessible in their own dimension.

INTERLUDE: ANTARAN DOMESTIC POLITICS AND THE HEGEMONIC EXPANSION

Despite Antaran pride in their overwhelming technological and military superiority to the rest of the galaxy, the Hegemony was not the invincible bastion of power it believed itself to be. It had been divided into two factions since its foundation. Those Antarans who had been trapped within the dimensional prison formed the military "expansionist" faction (ruled by the cabalistic Antaran Central Command), and they constantly pushed for the expansion of Hegemony borders and conquest of neighboring rivals. Opposing them was the "internalist" faction, which had originated with those Antarans who had thrived outside of the dimensional prison (the former Antaran Federation). Their policies were more often focused on internal development, research, and a defensive military presence.

Rivalry between the two factions was strong, and Antaran policies shifted constantly, depending on which group was in power at the time. Fortunately for the local Orion races, the two factions were occupied with other events when the Antarans re-discovered the Orion Sector. The end of the Long Night negated the limitation of the effective range of the Trans-Dimensional Portals, and as a result the Hegemony launched a program to re-chart the ancient space lanes of their region of the galaxy (the internalists hoping to gain new scientific and cartographic data, the expansionists hoping to discover new directions for conquest). They soon rediscovered their ancient allies, the Alioth and the Meissans, but both empires had long since forgotten the Antarans and had succeeded on their own devices. They reacted to initial Antaran attempts at communication with hostility, and so both Antaran factions agreed to spend their energy on conquering and assimilating the two rogue empires.

Lord Admiral Kyphys Nrom took the Green Fleet (the defensive armada of the internalists, patterned with the color for strength) and challenged the nearby Alioth, while Grand Admiral Therion Vraak took the Black Fleet (the pride of the externalists, patterned with the color for conquest) and engaged the more distant Meissans. The Alioth proved to be far less of a challenge than expected, and thus the Green Fleet was quick to secure their space and begin integrating their worlds into the Hegemony. The Green Fleet ships were gradually cycled back to the fleet command center of Kathar, safely hidden within the Antaran Sector, for refitting and repairs. It was from these withdrawn Green Fleet forces that raiders were dispatched to probe and harass the Orion Sector, where they expected to find their ancient enemy, the Orions. Information *had* to be gathered on their fate during the Long Night.

The raider squadrons were deliberately kept small to allow the Antarans a certain measure of deniability if the Orions proved to have somehow become far more advanced than the Antarans. It was much to their surprise that the Antarans were originally unable to find a trace of the Ancient Orion civilization. When they discovered the now indigenous races of Orion (from a respectfully safe distance; they were shooting at each other after all), Antaran paranoia and arrogance kept them from admitting that these puny civilizations were not, in fact, being actively manipulated by a secretive Orion civilization lurking nearby. Eventually, some digging around various ruins they found in the Orion Sector convinced them that these barbarian races were, in fact, all that remained of "the enemy."

Although the situation was ripe, the Antarans could only send out raids against these Orion barbarians while their two fleets were engaged in serious actions against worthy opponents. Thus, the Antaran raiders met with only limited military success in the Orion Sector as they lacked the numbers and focus to act decisively. Nonetheless, the Antarans conducted far more raids into the Orion Sector than the local Orion races ever knew about. The Green Fleet, true to its "internalist" objectives, set out to find any Ancient Orion settlements left on worlds not yet occupied by these new "locals." The Antarans absconded with untold secrets and treasures from the lost Orion ruins they discovered and looted, bringing these cultural and technological artifacts back to the Hegemony for further analysis.

Until the Green Fleet's victory over the Alioth could be completely consolidated, the Antarans had to play for time against their third front at Orion. And with the freaks of Orion busy killing each other, time was something the Antarans seemed to have plenty of.

THE GREAT WAR: ACT THREE — "RETRIBUTION"

Caught between the proverbial Silicoid and a hard place, the local Orion races could not find a political or military solution to the Antaran menace that was growing in strength, with larger strike forces coming through every cycle. Once again, the answer would come from the scientific community.

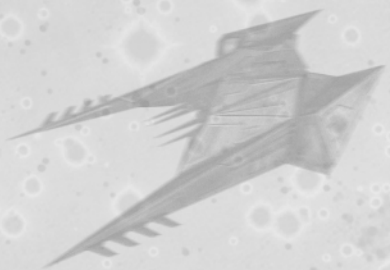
In 17914 GC, the Psilons accidentally discovered an ancient Orion research laboratory on one of their colony worlds, and with some effort deciphered the technologies therein. Most important among those technologies was a prototype for an Orion version of a Trans-Dimensional Portal, designed to go from normal space into the hidden Antaran Sector. With this key piece of the puzzle, the Psilons realized that the local Orion races would soon be able to avenge their losses.

Knowing that they themselves did not have the military muscle to challenge the Antarans single-handedly, the Psilons wisely chose to trade the Trans-Dimensional Portal technology to all the local Orion races (profiting vastly from the exchanges), and soon TDP's were being constructed around every homeworld. The Psilons also studied the Antaran attack patterns and, using the new knowledge they had gleaned from the ancient Orions, determined that all the Antaran attacks were being launched from a single point in other-

dimensional space. They hypothesized that that point would be the Antaran homeworld, and thus their best target. The local Orion races agreed, some of them even daring to send raiding parties through their portals to challenge the Antarans on their own turf.

The Antarans were barely concerned with such raids; there were always enough refitted Greet Fleet ships to destroy the Orion invaders long before they could threaten Kathar itself, and the Orions themselves proved to have technology insufficient to the task of actually hurting an Antaran world. The Antarans waited patiently, the Green Fleet finishing up with the Alioth Sector and the Black Fleet continuing the war against the Meissans.

The Antarans' mistake was to miscalculate the sheer hatred the Orions had come to feel for them, a hatred that drove those races day and night in preparation for war with their greatest enemy ever.



CHAPTER SIX: TECHNOLOGY

Technological Research in *MOO3* is handled through the Technology screen. As your civilization grows, each planet can generate Research Points in order to fund the growth of technology. Research Points (RPs) generated each turn are applied to designated schools of research for the empire.

THE PROCESS OF TECHNOLOGY

Once your empire has generated Research Points, you need to decide where to spend them. In the Technology screen there are six theoretical Schools toward which Research Points can be allocated. Progress in each of these Schools will cause additional technologies to become available for research by your empire. The technologies do not become available immediately — first, the knowledge must be adapted into practical applications through research projects.

RESEARCH

It's not enough to learn a new scientific principle: you need to actually build something based on that knowledge in order to give your empire access to the technology. Once you've progressed to the appropriate level in a given School for a technology to become available, a research project is initiated and your scientists will begin creating the first prototype. This process can vary in the amount of time it takes. During this time the project is subject to cost or time overruns, as well as being vulnerable to enemy spies. Once the project is complete, the technology is available to your empire.

ADVANCES

Technological Advances affect your entire empire and don't need to be built. Once their research project is complete the Advance is automatically applied throughout the empire.

OVERRUNS

Scientific research is never entirely predictable. Unexpected roadblocks sometimes appear, and promising theories sometimes turn out to be false leads. Ultimately, perseverance will bring success, but sometimes these roadblocks, known as Project Overruns, can cause a project to cost more money or take longer than expected. Sabotage by enemy spies can also cause Project Overruns.

GAMER TIP: You can see the progress of a project and any overruns that have occurred by selecting the individual research project on the Technology screen. Also, you will normally receive a SitRep message when an overrun occurs, though sometimes your least competent researchers will not even announce their failures.

SECONDARY REQUIREMENTS

Some technologies require more than just a certain level of research in the original School in order to be available for research. To find out if this is the case, you can look at the icon for the technology in the Technology Matrix screen.

HOW RESEARCH POINTS ARE GENERATED

Research Points in your empire are generated from your planets through the building of Research DEAs and supporting structures. Similar to the planet's economic systems, these structures create the capacity at the planetary level to accept funding and generate Research Points for the empire. You can adjust the amount of money allocated to Research on a particular planet by using the Economics panel on the Planet screen.

You can provide additional funding above the base capacity, but will see diminishing returns as you increase the amount. The funding bar will change colors to reflect this. When this bar is green, the planet is creating 1 Research Point for every AU spent. At the next level it costs 2, then 3, etc.

If a planet cannot afford to spend enough AUs to fully fund your research, you can also divert empire funds through the Budget-Finance screen toward Research. These funds are allocated toward whatever capacity the planet has left, and are affected by the same rule of diminishing returns as planetary spending.

GAMER TIP: To most efficiently generate Research Points at the planetary level, keep the funding bar at the highest point where it's still green.

TECHNOLOGY MATRIX

The Technology Matrix screen shows all the projects that your empire or other empires have completed and the levels achieved in each of the six Schools. It also displays those technologies that are upcoming and will be available soon. This differs from game to game — not everyone gets every technology.

GAMER TIP: Keep watch for upcoming technologies that may give you a particular advantage, and consider allocating extra research points to those items so you can take advantage of them more rapidly than your opponents. Even a small technological advantage can have a decisive influence in a close race.

VIEW BY

This drop-down lets you view the Technology Matrix from the standpoint of any race with whom you have made diplomatic contact. It defaults to showing your own information. This is very helpful when deciding what sorts of trade offers to make.

The technology system in *Master of Orion 3* places the various areas of scientific research in six major categories, called Schools. These are:

ECONOMICS
This school studies practices and institutions that involve, or have significant effects on, the production and allocation of resources under conditions of scarcity. Theories include that of Law, Economics, Process Engineering and Education.

ENERGY
This school investigates the underlying structure and functioning of the universe by studying the nature of the various forces at work within it. It involves theories in Relativistic Physics, Quantum Mechanics, Subatomic Physics, Energy Fields, Matter-Energy Conversion, Transwarp Physics, Temporal Physics, Optronics, Quantum Electronics and Transdimensional Electronics. Its benefits include new weapon types and shield abilities.

BIOLOGY SCIENCES
This school investigates the structure and functioning of living organisms and life processes. It involves Bioelectronics, Bioharvesting, Medicine, Genomics, Bioengineering, Nano-Medicine and Xeno-Biology. Its primary benefits relate to farming and medicine.

MATHEMATICS
This school investigates the structure and functioning of symbolic systems and their practical applications. The theories it involves are those of Computer Science, Number Theory, Game Theory and Robotics. Its benefits involve primarily Robotics and Artificial Intelligence but it tends to overlap a number of related areas as well.

PHYSICAL SCIENCES
This school investigates the underlying structure and functioning of the universe by studying the nature of matter. Funding this area of research involves investigations into Astro-Engineering, Astro-Physics, Construction, Materials Science, Mineral Extraction and Planetology. Its primary benefits include new methods for building materials, mining procedures, weapon types, and construction.

SOCIAL SCIENCES
This school investigates the thoughts, behavior, and institutions of sentient life forms with a strong emphasis on understanding their frames of reference and on facilitating cooperative activity. Associated theories include Psychology, Xeno-Psychology, Political Science, Philosophy, Cultural Enhancement, Criminology and Military Science. Primary benefits include tactics, diplomacy and race relations.

THE ORION SECTOR PART VII
THE BATTLES AT ORION AND ANTARES

The Orions eventually accepted the inevitable truth: only together could they defeat the Antarans, and then only with powers granted by ancient Orion technology. The Psilons had proven that where the ancient Orions had been, technological riches were not far away. And though it would be nearly impossible to predict where other Orion colonies may have been, there was one place in the sector where there was no doubt of past Orion presence: Orion itself. Protected by the seemingly omnipotent Guardian, the planet Orion had never been touched by the local Orion races.

An immense battle group was constructed and assembled, consisting of the best of ships from all races, and placed under the command of the legendary Human Admiral Parvenarius Dalan. Their plan was simple — defeat the Guardian, secure Orion. They knew full well, however, that neither task was as simple as that. The casualties taken by the Orion fleet were enormous, but in the end, the massive firepower they brought to bear on the Guardian won out.

With Orion secured, the second phase of the plan went into effect. Technologies taken from the Guardian and Orion itself were incorporated into the Orion fleets, and over several cycles a new battle group was constructed. Loknar, a mysterious stranger who greeted the landing parties when they arrived on Orion, helped the young Orion races understand the technologies they had discovered, and gave their leaders insight into the military mindset of the Antarans. And so, in the fateful cycle of 18012 GC, the local Orion races gathered another enormous fleet and entered a Trans-Dimensional Portal to challenge the Antaran homeworld.

Historical Note: Interracial unity in this endeavor led to many joint ventures for fleet construction. The Humans and Psilons united and shared their shipyards and materials jointly. Likewise, the three Saurian races cooperated in rebuilding their warships, and the Klackon-Tachidi unity exchanged shipbuilding techniques freely. The end result of this cooperation was a distinct similarity in ship designs among all the races within each species.

The Antarans stationed at Kathar were, to be fair, quite surprised at the number of barbarian ships that suddenly entered their space, but they were not overly concerned. The majority of the Green Fleet ships were on duty and ready for action, pending a final inspection by a senior member of the Hegemony's Defense Directorate and Lord Admiral Nírom himself. But the Orions had nearly evened out the technological edge, and fought with a singular unbending purpose: revenge. The Antarans at Kathar were completely annihilated, the planet bombarded, and every last Antaran vessel destroyed. The Orions still took heavy casualties, but the victory was theirs.

The heroes of the Battle at Antares were honored throughout the sector, and celebrations lasted for cycles on end. Loknar vanished shortly after their return, saying that there were other matters that still needed tending to, and finishing with the cryptic phrase, "Be ready." The Humans once again took a political leadership role, building a new capital city on Orion itself, convening the new Orion Senate, and getting themselves elected to the presidency. The Orions focused again on rebuilding and internal expansion, but the years following the Great War contained their own challenges for the Orion Sector.

Historical Note: Perhaps the one positive venture initiated by the Orion Senate was a massive long-range exploration program to survey the sectors nearby, the Galactic Core, and even send probes to galaxies outside their own. The fate of these probes is unknown, but given what we know of the Antaran Hegemony, the galactic core probes were almost certainly destroyed long before reaching their destinations. The probes sent to other galaxies might still be operating, but there seems to be very little interest these days in re-establishing contact with them.

Historical Note: No one knows exactly who Loknar was, where he came from, or what he wanted. Conspiracy theorists of the time concocted thousands of possibilities, ranging from his being an advanced android, a lost Orion, an Antaran defector, something from another galaxy or sector of this galaxy, and more. But the most heated question that was later asked about Loknar was why he never mentioned that the local Orion races had not crushed Antares itself during the so-called "Battle at Antares"...

Historical Note: The false assumption made by the local Orion races regarding the destruction of the Antarans was understandable. The Antarans had wisely launched all of their Orion Sector incursions from the TDP at Kathar. Only Green Fleet ships were used for these incursions, which meant that the Orion races were completely unaware of the other armada the Antarans had at their disposal. Almost the entire Green Fleet had been destroyed in the battle, and therefore the Antarans had no more ships to spare for additional raids into the Orion Sector. The Orions chose not to investigate the creepy other-dimensional space of the Antaran Sector, and the Antarans played dead. None of the Orions realized that they had merely destroyed a single (albeit important) world in the Hegemony...

THE CALM BEFORE THE STORM

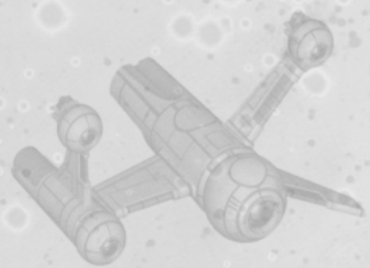
Three extremely critical events took place shortly after the Great War that, historians feel, played a major role in the weakening of the Orion Sector for the horrors to come.

The Meklars, cybernetic beings who had provided the Orion Sector with a powerful industrial base, went through a schism that split their populace in half. As technology appeared that made it possible for the Meklars to abandon all remnants of their organic selves and evolve into purely mechanical beings, the question arose: Should their society take that final, absolute step? The Meklar society was bitterly divided on the issue, and so, even as their scientists successfully prepared the first True Meklar, the ruling council narrowly voted in favor of the transformation. The Purification, as it was called by its protractors, was a lengthy process, and not all Meklars survived the transformation. Those who did not wish to undergo the Purification were granted colony ships and politely but firmly invited to leave Meklon forever. Those exiles settled on a distant world and called themselves the Cynoids.

The end of the Great War also saw an abundance of new technologies being shared among all the local Orion races. One such experiment caught the attention of Etherean spies — the terraforming of gas giant worlds. The Ethereans paid the Darloks huge sums to sabotage the various projects underway, but the Human-Psilon alliance nonetheless managed to succeed in "formatting" a test world, killing tens of millions of Ethereans. The gas giant dwellers retaliated, continuing to use covert methods while venturing

out into the field of battle for the first time. It did not go well for them; the Ethereans lacked the mass production capabilities of the other races, and could not rebuild their fleets fast enough to stand against the Humans, the Psilons, and eventually the Sakkra and the Mrrshan as well. They withdrew, relying solely on Darlok-funded sabotage operations while reconsidering their options. The amount of energy, money, and resources spent during this war was almost incalculable, despite the minimal loss of life.

The Raas Rebellion was the nail in the Sakkra coffin. The belligerent Saurian race, ever desirous of revenge against the hated Trilarians, had continued to use genetic manipulation to better themselves even after they had left Trilar. Unfortunately, they did not have the same knack for it as the Antarans and Orions had, and more often than not their experiments were abominable failures. Two of their success stories were the Raas (12247 GC) and the Grendarl (14022 GC). The Raas were a strong and industrious race, and the Sakkra cloned them en masse and used them as slaves and low-class labor. The Grendarl, however, were a warrior race, pure and simple, possessed of a code of honor and discipline that served them well on the battlefields. The Sakkra granted them positions of power within the Saurian armed forces as shock troops, infantry instructors, and security. After the Great War, the Raas, having suffered in work camps building up new Sakkra colonies and fleets and gaining nothing but abuse from their masters, orchestrated a revolt that slew hundreds of thousands of Sakkra and threatened to overthrow the Sakkra leadership. The Sakkra ordered the Grendarl to fight for them, and the Grendarl reluctantly agreed. Though the rebellion was put down, all three sides took tremendous losses, and the Raas left Sssla to start a new world in freedom. The Grendarl, feeling that they had betrayed their honor in fighting against the Raas, voluntarily left Sssla as well and colonized their own homeworld.



CHAPTER SEVEN: FINANCE

The Finance screen allows you to set up the economic policies for your empire, including taxation, military spending, and planetary grants to help developing colonies survive. You can also get a complete breakdown of your empire's income and expenditures in Antaran Units (AUs).

The Budget panel allows you to determine how to spend your imperial revenue. This is done via Imperial Economic Adjustments and Financial Policies.

IMPERIAL ECONOMIC ADJUSTMENTS

ADDITIONAL RESEARCH SPENDING

This slider bar determines how much extra money is directed toward research and development. Grant monies will be distributed by the Empire to the planets which it feels will make the best use of the funds.

MILITARY BUDGET

You can use this slider bar to dedicate funds to accelerating the production of ships, ground troops and defensive structures. Grant monies will be distributed by the Empire to the planets which it feels will make the best use of the funds.

UNREST

Use this slider bar to support planets in fighting unrest and keeping the populace happy.

GRANTS TO PLANETS

Money allocated by this slider bar will provide funding for colony development, such as DEAs and other planetary structures.

FINANCIAL POLICIES: MILITARY-POLITICAL ECONOMY

You can decide how much money should be devoted to military purposes. During times where conflict is at a minimum, the "Peace And Prosperity" policy will use no more than 10% of your income for military purposes. The "Peace Through Strength" policy increases that to 20%, allowing you to build up your armed forces slowly while still developing other facets of your empire. If you are engaged in wars with one or more opponents, the policies of Limited, Total, or Holy War will devote up to 30, 50, or even 67% of your imperial revenue to military spending.

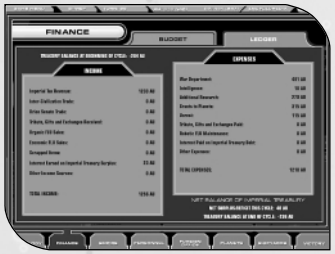
GENERAL BUDGETARY POLICY

This will allow you to set an overall financial strategy for your empire. If you have a large surplus of capital, the Spending policy will take advantage of that and allocate AUs anywhere and everywhere to enhance development and production. Choosing a Balanced policy will keep your imperial treasury at a status quo. Finally, following a Saving policy will have your treasury hoarding capital and minimizing expenditures wherever possible.

TAX LEVELS

You can set the overall taxation levels from the empire and for each star system under your control here. Remember that each empire has a certain level of taxation that it can tolerate, and that increasing or decreasing taxation levels from that point will affect unrest accordingly.

LEDGER



The Ledger contains a summary of revenues and expenses for your empire during the current turn. The information in the two panels cannot be directly manipulated in this screen, but can be affected from various other locations.

Above the Income panel is the Treasury Balance at the Beginning of the Cycle. This number tells you how much money you began the turn with.

INCOME

IMPERIAL TAX REVENUE

This shows how much money was earned from empire-wide taxation.

INTER-CIVILIZATION TRADE

If you have trade agreements with other civilizations, the total amount earned is displayed here.

ORION SENATE TRADE

This shows the amount of trade with members of the Orion Senate.

TRIBUTE, GIFTS AND EXCHANGES RECEIVED

If you have received money from other civilizations via tribute, gifts, or other exchanges, the amount received is displayed here.

ORGANIC FLU SALES

Forced Labor Units can be sold; revenue from such transactions appears here.

ECONOMIC FLU SALES

This is the same as for Organic FLUs except that it applies to robotic units.

SCRAPPED ITEMS

Items such as ships or structures can be scrapped for a quick monetary gain.

INTEREST EARNED ON IMPERIAL TREASURY SURPLUS

If you are playing a game with timed turns, any interest you earn by finishing your turn early is displayed here.

OTHER INCOME SOURCES

Any other money earned this turn is mentioned here.

TOTAL INCOME
The sum of all above-mentioned income.

EXPENSES
WAR DEPARTMENT
How much money was spent on military production. This is affected by your Military-Political Economy policy (see *Financial Policies*, pg. 78)

INTELLIGENCE
Money spent maintaining your spies and funding their missions is displayed here.

ADDITIONAL RESEARCH
Extra funding allocated to research is mentioned here. This is affected by your Additional Research Spending slider (see *Imperial Economic Adjustments*, pg. 78).

GRANTS TO PLANETS
Extra funding allocated to planetary development is mentioned here. This is affected by your Grants to Planets slider (see *Imperial Economic Adjustments*, pg. 78).

UNREST
Extra funding allocated to combating unrest is mentioned here. This is affected by your Unrest slider (see *Imperial Economic Adjustments*, pg.78).

TRIBUTE, GIFTS AND EXCHANGES PAID
If you have offered money to other civilizations via tribute, gifts, or other exchanges, the amount paid is displayed here.

ROBOTIC FLU MAINTENANCE
If your civilization has robotic FLUs active, their total maintenance cost is displayed here.

INTEREST PAID ON IMPERIAL TREASURY DEBT
If you are playing a game with timed turns, any interest you owed as a result of deficit spending is displayed here.

OTHER EXPENSES
Any other expenditures for this turn is mentioned here.

TOTAL EXPENSES
The sum of all above-mentioned expenses.

NET BALANCE
Below the Expenses panel is the Net Balance of the Imperial Treasury. The Net Surplus/Deficit This Cycle is Total Income minus Total Expenses. The Treasury Balance at the End of the Cycle tells you how much money you will have left when you end your turn.

GAMER TIP: In the middle of the Game Toolbar is a tab that depicts your current financial status. The number in white is equal to the Treasury Balance at the beginning of the cycle plus the Total Income. The green number next to it is the Total Expenses you will incur by the end of the turn.

THE ORION SECTOR PART VIII
THE ANTARAN WAR

Following their defeat at the hands of the Orion barbarians and the glazing of Kathar, the Antarans correctly gambled that, since no further incursions were launched from the Orion Sector, the barbarians might believe they had destroyed the only Antaran world. Although Antaran politicians fumed and postured about avenging their ignominious defeat at Kathar, cooler military heads prevailed and a policy of ignoring the Orions was adopted. *No* raids or messages of *any* kind were allowed to go to the Orion Sector. Against their nature, the Antarans "played dead" and allowed the Orions time to form their own misconceptions.

With this policy, the Antarans turned all their energies to finishing their ongoing war with the Meissans, as well as establishing a new fleet command center at Naeimon. The few remnants of the Green Fleet finished securing the space around the Antaran Sector, including Alioth space and the sector occupied by the long-extinct Dubhei. By 18021 GC, Admiral Vraak came through again with a decisive victory against the Meissans, and with the end of that war the next two decades were spent garrisoning Meissan space and fully refitting their fleets. The borders of the Hegemony now extended well beyond the Antarans' capacity to develop for centuries, and thus, as the Orion barbarians had done unto them, they too turned all of their resources toward a single goal — revenge.

Scientific Note: The victory against the Meissans was due to a major breakthrough in Wormhole Physics. The Antarans spent many cycles researching wormholes, looking for a faster alternative to hyperspace travel, and found that there existed in normal space a number of linked pairs of locations, which they called "jump points." Jump points were essentially places were fully stable wormholes weren't quite able to form, but between which temporary, unstable pseudo-wormholes could be formed by the proper manipulation of space-time. Theses pseudo-wormholes were still not as efficient as natural stable wormholes, but they were definitely much faster than any hyperdrive ever developed.

As a result, the Antarans almost completely abandoned hyperspace travel in favor of using jump lanes, the paths connecting jump points. Jump drives were developed for ships to make the necessary manipulations to open the pseudo-wormholes and to protect the ships from the chaotic gravity fluctuations attendant with such an event. In addition, as a result of jump drive research, improvements were made to standard hyperdrives that enabled speeds up to warp 11 and rendered traditional maneuver drives obsolete. While ships still could not travel at hyperspace speeds while within a system's gravity well, they could nonetheless travel much faster than once thought possible.

Several other related technologies came into play with this breakthrough. Warp amplifiers affected the shape of the pseudo-wormholes' frequently distorted interiors, making them smoother and thus accelerating travel between jump points. Jump gates were portals built at jump points that stabilized the jump points and allowed ships without jump drives to use jump lanes. Warp interdictors were based on studies of the interference that nebulae created in jump lanes, and were set up by the Antarans in case hostile forces ever used their own jump gates.

In 18051 GC, the Antarans returned to the Orion Sector, fueled by rage and powered by their completely refitted Black Fleet. The Antaran War was a far more brutal fight than even the Antarans expected, but their fanatical zeal ultimately carried them through as they hammered the Orion races into

submission. The Orions fought valiantly, devoted wholeheartedly to their survival against an enemy thought dead, but they were still too fragmented and weakened after their own civil war and internal conflicts to put up the coordinated fight that they needed.

POST-WAR ANALYSIS

To the Antarans, the only remarkable aspect of the war was its protracted length — it took all of 25 cycles to completely subjugate the sector. The barbarians fought with unexpected strength and fury, and did their share of damage to the Antaran forces, a fact that did not sit well with the Hegemony leadership. However, the Antarans could not have planned their attacks any better, and most studies agree that they achieved maximum efficiency through the proper combination of intelligence, tactics, and technology, thus minimizing the overall duration and cost of the war for the Hegemony.

The first phase of the war was the intelligence-gathering process. Using mercenary spies, the Antarans learned almost everything they needed from data stolen from the Orion Senate proceedings. That, combined with other information taken from various governmental and military installations, gave the Antarans the understanding of the Orion races' weaknesses, and they took maximum advantage of that information.

Using an off-the-shelf virus they had developed during their war with the Meissans, the Antarans poisoned the Elerians with what became known as the "Mind Worm" plague. Not actually a plague, it was more of a viral parasite that attacked the telepathic centers of the Elerian females and ate away at that part of their brains. When the Elerian Queen herself was infected by the plague (considered by the Elerians as a fate worse than death), other royal families saw an opportunity, and a struggle for the crown erupted. This, in conjunction with a few gender riots that the Antarans orchestrated among the "common" male population, led to a global civil war, and the Elerians therefore never brought their entire strength to bear against the Antarans.

Historical Note: The Mind Worm parasite was a precursor to several experiments by Antaran geneticists to develop a more universal parasite they could use against all of their enemies. This project, code-named "Harvester," would one day succeed beyond the Antarans' wildest dreams. Or nightmares.

The Mrrshan pride in their combat skills became their undoing. Therion challenged the Mrrshan fleet in several engagements, feigning defeat at key systems and beating a path of retreat away from the Mrrshan homeworld of Fieras. The Mrrshan pursued his ships, eager to capture an Antaran fleet commander, and when they were far enough from their own power base, a reserve Black Fleet task force cut into the poorly protected Mrrshan systems and annihilated dozens of their colonies while sweeping forward to meet Therion. Cut off and pinned, the Mrrshan fleet went down in a blaze of glory at the battle of Tholan VI.

The Bulrathi pulled out of the Orion alliance late in the war, as their soldiers, feared even by the Antarans, were being left behind on worlds decimated by Antaran forces. The Bulrathi shock troops were often the last line of defense against besieging Antarans, and as the Orion Senate withdrew its troops and equipment

back more and more frequently, the Bulrathi marines were abandoned, with no hope of rescue. The Antarans fueled the Bulrathi's anger by showing them images of their troops being tortured to death by Antaran soldiers. When the Bulrathi quit and ordered all their soldiers to withdraw back to Ursa, several worlds that were barely holding out against the Antarans collapsed, resulting in a final shift of the war's momentum in favor of the Antarans.

Several other key actions — the deliberate collapsing of the Gnolam financial system, a forcing of hostilities between the Sakkra and the Trilarians, and the use of a liquid firebomb that flowed through and incinerated the Klackon hives among them — further served to weaken the Orion power base and simplify the Antarans' endeavor. In addition, not all of the Orion races participated in the battles; the Meklars were still freeing themselves from "the prisons of the flesh," and the Cynoids had left the sector. The Ethereans, still recovering from their failed war against the other Orions, sat out and refused to help their neighbors (although, in the end, they were treated no better than anyone else by the Antarans). The Evon surprised the Antarans, fighting from the outer limits of the Orion Sector, but even their substantial forces were not enough to defeat the entire Black Fleet.

Historical Note: The Third Orion-Antaran War saw some of the most brutal and vicious ground fighting the sector had ever known. Nuclear, biological, and chemical weapons were employed more and more frequently in efforts to achieve even minor local tactical advantages. The cavalier use of these "dirty" weapons rendered several worlds uninhabitable for centuries afterward. The horrific memories of these vile forms of warfare would be etched into the cultural psyche of the Orion civilizations for millennia.

As the war progressed and the Orion fleets suffered ever-increasing losses, many worlds simply built up their planetary defenses in an effort to withstand a siege long enough for a miracle to happen. However, even these "fortress" worlds were not strong enough to hold off the Antaran warships. Therion ordered the first dozen or so destroyed without mercy or warning. After that, the Antaran fleets began offering terms before laying siege to the Orion worlds. A recording of Therion's cold, gravelly voice would dominate the planet's airwaves: "You will surrender unconditionally. We *will* collect hostages and we will draft workers and soldiers from your world to serve us. They will *not* be returned. *Their* behavior will determine the fate of those they leave behind. Monitoring stations *will* be placed over your world to insure compliance. Accept this or we will begin to destroy your world in one millicycle."

Approximately 12 hours later, the matter was closed and the planet's fate settled — one way or another.

In the earlier stages of the war, many worlds rejected the Antarans' terms outright, choosing to fight to the death rather than surrender. However, a failure to gain any kind of forward momentum against the Antaran invaders soon ground into the spirits of the Orion people, and one by one the Orion worlds began to give in. By the early 18060's, the Antarans were conquering entire systems in the Orion Sector without firing a shot. Even the proud warrior races like the Mrrshan, the Elerians, and the Sakkra saw their own colonies bow their heads in submission. Ultimately, only the Sol system remained as a bastion against the overwhelming tide of Antaran power. In 18066 GC, the Black Fleet met the Human armada

(supplemented by every renegade warship from the other Orion races) in the skies above Earth, and although the Orions fought with all the fury of a cornered animal, the outcome was never truly in doubt. Four millicycles later, Therion's voice sounded across Sol, and the Humans surrendered.

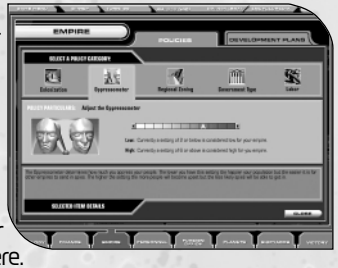
CHAPTER EIGHT: EMPIRE

The Empire screen allows you to set policies that have empire-wide effects. Detailed explanations of the individual settings for each policy are available on the screen. The policies you can adjust are as follows:

COLONIZATION POLICIES

If Colonization AI is set to "On," your advisors will automatically send colony ships out to colonize as often as they are available. Otherwise, your ships will wait for you to tell them which planets to colonize. This does not affect how often the AI builds colony ships — only what happens to them after they are built.

OPPRESSOMETER



The Oppressometer lets you decide how much to oppress your people. The lower you have this setting, the happier your population will be, but the easier it will be for other empires to send in spies. The higher the setting, the more people will become upset with you, but the less likely spies will be able to get in.

Unhappy people will tend to leave your empire and seek their fortunes elsewhere. Happy people will invite their friends to join them, resulting in increased population and economic activity.

Higher settings of the Oppressometer will also tend to cause more frequent overruns in technology research, and simultaneously reduce the odds of your being informed of these overruns (highly stressed researchers tend to get sloppy). And higher settings will cause your people to have higher expectations of the government's defensive capabilities, so you'll probably want to build more military DEAs.

REGIONAL ZONING

The Zoning Policy advises every planetary viceroy in your empire how to prioritize the structures that are built on each planet. The "Natural" setting will cause structures to be built based on current needs and what the planet seems best suited to support. The "Specialized" setting will divert additional resources toward a

specific type of DEA, such as Research, which will be efficient but may cause shortages of some materials that will then need to be imported from elsewhere. The "Balanced" setting will cause the planet to do a little of everything and not be especially good at anything. The planet will strive to build equal numbers of each DEA.

GAMER TIP: Policies tell the planetary viceroys what you ideally want, but that doesn't mean you'll always get exactly that. For example, even if you have a "Specialized" world that's ideal for mining, other DEAs will get built there at various times to make sure the population is fed, housed, and protected militarily.

These policies affect every planet in your empire. To adjust the priorities for a single planet, see the Development Plans panel of the Empire screen.

Below the region number are the DEAs, if any, that are built or being built in this region, plus what they are producing and consuming. At the far right of each DEA you'll see an icon showing the type of production generated by that DEA and the amount being contributed to planetary output by that particular DEA. If the DEA is still under construction, this column will show a graph indicating the number of turns until completion of the DEA. Some DEAs, such as Industry, consume one kind of resource and produce another. The item that they are consuming will be shown to the right of the production number.

Some DEAs contain important buildings. These are shown below the DEA in the list. For example, the Government DEA may contain a System Seat of government and an Imperial Seat of government.

You can click on any DEA or building in the list in order to see more information on it. You can also remove some items, if you wish.

GOVERNMENT TYPE

There are several types of governments that your empire can have. Each has its advantages and disadvantages. If you're going to change your government type during the game, make sure that your populous is happy. Otherwise the unrest levels, which are caused when the government is changed, could quickly drive your empire into full-scale rebellion.
Note: Not all types are available at the start of the game.

DESPOTISM

In a Despotic government, the Leader is a military dictator whose authority ultimately rests on force of arms and the secret police. Despotic Leaders enjoy a great deal of clout, as the Despotic system of government concentrates power in their hands. For the same reason, Despotic governments are always highly centralized. Since the Leader and other powerful members of the government are subject to few checks on their authority, opportunities for corruption abound. Ruthless use of the internal security apparatus can help keep corruption in check, but care must be taken to ensure that this does not merely displace most of the corruption to the internal security forces themselves.

Should the regime's backing dissolve, despotic Leaders risk losing their grip on power and, often, their lives as well. It is not difficult for the military and internal security to replace the Leader in a coup provided that they remain united. However, succession often triggers vicious internecine power struggles, which, if they go on for a protracted period, can bring down the whole system. Similar difficulties attend Despotic governments when the Leader retires or dies in office. Many despots try to pass on the office of Leader to their children, thereby founding a dynasty. In this way, Despotic regimes can, over time, become Monarchies.

Despotic regimes boost Industry and Military productivity, though Mining and Bioharvesting will tend to suffer.

MONARCHY

A Monarchy can be anything from a feudal system in which the monarch outranks other nobles only slightly to a regime in which the monarch is considered to be a living god, whose every whim carries the force of law. But there is one constant: a Monarch who claims to rule by right of succession. Being a blood descendent of the reigning monarch is preferred, but it is not the only method. Should an entire dynasty come to a end, pretenders to the throne may claim to be descended from members of a previous royal family.

Only monarchs unable to claim the throne by blood, or true tyrants, are likely to rely heavily on the military to prop up their governments. Most others rest upon their hereditary claim on the throne, buttressed by tradition. A certain amount of corruption is practically inevitable, especially when personal funds intermingle with those of the treasury.

Transfers of power show Monarchy at both its strongest and its weakest. When one member of the ruling dynasty succeeds another, the transition will be smooth and the new regime's legitimacy virtually unquestioned. ("The king is dead! Long live the king!") This legitimacy can come at a heavy price, however, as when the heir is not competent to govern. While this spells trouble for the government, installing someone other than the legitimate heir to the throne often leads to even worse trouble. If someone usurps the throne from the rightful heir, or if the empire has the misfortune to have its monarch die without an heir or clearly designated successor, widespread unrest and even civil war are more than likely to follow.

Industry and Military production tend to flourish under Monarchy, while Research and Bioharvesting fare poorly.

OLIGARCHY

The word "oligarchy" means "rule by the few." In general, an Oligarchy is a transitional form of regime in which only a very small minority of the population is enfranchised. Depending on the faction(s) enfranchised, an oligarchic regime could be known by any number of names. For example, an Oligarchy dominated by the military and internal security is generally referred to as a "Junta," while an Oligarchic regime run by the social elite will often call itself an "Aristocracy."

Many less familiar forms are also possible, e.g. "Technocracy," in which members of the scientific elite govern.

All formal power in Oligarchies resides in a council chosen by the enfranchised few. Oligarchs fear allowing any one of their number to accumulate too much power, so leadership of the council changes often. Inter-council politics are tumultuous and rife with intrigue. and the Leader of an Oligarchy therefore has less clout and less time to concentrate on administrative matters than do leaders of more stable regimes. Government officials are not subject to consistent oversight, and the current Leader has a strong incentive to overlook the misdeeds of other council members in order to maintain goodwill, so Oligarchic governments are often quite corrupt.

The fluid nature of an Oligarchy has a deleterious effect on Industry efficiency, while slightly encouraging Research. Other aspects of such societies tend to perform in an average manner.

CONSTITUTIONAL MONARCHY

This is a transitional form of government that lies between Monarchy and Representative types of governments. The Leader is a monarch who must share power with an elected parliament. Unlike in most other governments, the Leader of a Constitutional Monarchy is frequently a figurehead (i.e., is disenfranchised), while the real power lies with the Prime Minister of parliament.

A party in parliament with the monarch's support and a strong majority can run roughshod over the opposition, but if the monarch is at odds with parliamentary leaders or if the party in power lacks a firm mandate, gridlock can result. Monarchs do not have to worry about being re-elected, so they generally have more time to devote to affairs of state than leaders of some other government types.

Thanks to the split in accountability between the monarch and the parliament, and historical prerogatives that any monarch will retain, Constitutional Monarchies afford greater scope for corruption than do Representative governments. Nevertheless, corruption is generally much lower than in Monarchies.

Constitutional Monarchies are fairly stable. While frequent changes of prime minister are to be expected, the monarch provides the government with continuity. Transfers of power from one monarch to another are generally orderly if a legitimate heir to the throne is available.

Constitutional Monarchies tend to perform in an average manner across the board, except for a slight inefficiency in Industry.

CORPORATE

Corporate government combines aspects of Absolutism and Representational government, and adds some special features of its own to the mix. A Corporate government is run like a business, for profit. The Leader will be the CEO of the governing corporation, and is answerable to a Board of Directors and, ultimately, the citizens. Everyone will be required to pay taxes to cover the basic costs of defense and other government services. Basic citizenship can be purchased, and

extra privileges (extra votes, profit-sharing dividend payments, etc.) are also sometimes available for a price.

A Corporate government may declare a monopoly over certain key sectors of the economy (most often defense and law enforcement), or it may compete with other corporations in an entirely free market for services. In any case, efficiency is one of the over-arching goals of a Corporate regime. To eliminate government waste, many Corporate regimes link the compensation of government officials to the Corporation's profitability, or that of their division. This means that unprofitable services, e.g. social programs, are few and far between in Corporate governments. While petty embezzlement is common, major corruption is not.

The Corporate Leader has broad powers to establish and carry out policy, and hence combines both executive and legislative functions. CEOs who keep the Board happy can rule with a relatively free hand. The need to keep an eye on ambitious subordinates prevents CEOs from devoting all their time to "big picture" strategizing. Changes in CEO require a period of re-adjustment, but such transitions of power are often relatively smooth.

Mining and Industry are extremely efficient under Corporate rule, but Bioharvesting suffers somewhat, as do Research and Recreation.

DEMOCRACY

In a Democracy, both executive and legislative questions are decided by direct popular voting. In more egalitarian Democracies, leaders often have no formal authority, and are simply citizens whose rhetoric consistently sways the majority of their fellows. In other cases, a President or other chief executive will be elected to serve a fixed term. Democratic governments usually take decisive action, but are liable to make rash decisions, followed by rapid reversals of policy.

Since Democratic Leaders must worry both about getting re-elected and about making sure that their policies are popular, they are frequently diverted from thinking about affairs of state. Democracies enjoy relatively low levels of corruption and of government waste, fraud, and abuse.

Citizens may eventually tire of the need to continually pay attention to government affairs and push for a Parliamentary or Representative government that allows them to delegate most of their duties to professional politicians. Another possibility is for a demagogue to seize power and convince the majority to change the constitution in favor of another type of government, often a Despotic one.

Bioharvesting, Mining and Industry tend to do well under Democracy, while Military efficiency suffers.

PARLIAMENTARY

In a Parliamentary system, several different political parties vie for the votes of enfranchised citizens. The leader of the majority party or coalition of parties becomes the Prime Minister, who leads the central government.

Since the parliament unites executive and legislative functions in one body, the Leader will have a fairly large amount of power, although this might be tempered by the need to keep key legislators or coalition partners happy. Still, as long as

a party or coalition maintains its majority, the opposition will have minimal power. Should a government fail to deliver on its promises, it is likely to fall and be replaced by the opposition. While individual governments may change, though, the Parliamentary system itself is relatively stable, and generally enjoys orderly transfers of power.

Bioharvesting and Mining do well under Parliamentary rule, and Industry is highly efficient.

REPUBLIC

In a Republic, the legislative branch is separate from the executive branch. The Leader will thus be a chief executive. The need to secure legislative support means that the Leader of a Republic will not have as much personal influence as the Leaders of many other types of governments. Nevertheless, as popularly elected heads of government, Leaders of Republics are in a good position to take advantage of "the bully pulpit" in order to build public support for their policies.

Because the Leader may face strong opposition from the legislature, a Republic may be slow to take action, and the Leader's agenda might be watered down or ignored altogether. Like their Parliamentary counterparts, Republics usually enjoy orderly transfers of power.

Bioharvesting and Mining do well in a Republic, and Industry is highly efficient.

HIVE

In a Hive society, subordinates unfailingly obey commands from their superiors. This may be because they lack any will of their own, or because they are physically or psychologically unable to resist a direct order.

A Hive Leader has enormous power. Whatever the Leader says, goes. However, since subjects can be counted on to obey commands, little bureaucratic and administrative infrastructure is needed to ensure compliance. Thus, in Hive regimes the Foot of Government is very light given the amount of control the government has over the populace.

Some races are naturally adapted to Collectivist forms of government. For example, Klackons do not think of themselves in individualistic terms, and hence simply can't oppose their self-interest to the needs of society in general. For races who lack these or similar characteristics, Collectivist governments will only be viable if means can be found to suppress their population's natural individuality and/or diversity of opinion, e.g. drugs, advanced propaganda, or brainwashing techniques.

Because the Leaders of Collectivist regimes do not need to worry much, if at all, about maintaining their hold on power or getting others to go along with their policies, they have more time to concentrate on long-term strategizing than the heads of most other types of governments. Hive governments are extremely stable. Unless a Hive regime is based on the use of technology to keep the masses in line and that technology fails, revolution from below against a Hive government is practically impossible. The only real threat is dissent among the elite, and even this may be impossible for some races.

Bioharvesting, Mining and Military production are very efficient in Hive societies, and Industry is also quite effective. Recreation, however, is not a high priority.

UNIFICATION

Unification governments are premised universal agreement among citizens about how society should be run. Citizens of a Unification government are conscious of themselves as individuals, but are for some reason able to reach a consensus about what is best for society, and are willing to sacrifice their individual interests (or lives) should this prove necessary. The Leader of a Unification government is presumed to speak for the whole society, and all are supposed to carry out government policies as soon as they are promulgated. Naturally, the Leader's influence is immense, and any policies the Leader communicates to the public at large carry the force of law.

In most ways Unification regimes are similar to Hive governments, except that the governed voluntarily obey the government instead of doing so because they are incapable of disobeying. Unlike a Hive government, though, there are no racial or technological prerequisites for Unification. Still, among individualistic races, only the most idealistic of populations is likely to make it work, and even then Unification will only be an effective system of government as long as the population's zeal holds out.

Bioharvesting, Mining and Military production are fairly efficient in Unification societies, and Industry is also more efficient than average.

LABOR

FORCED LABOR

This setting allows you to determine whether or not you're going to allow your empire to use Forced Labor Units (FLUs) and how you treat any forced labor or robotic units that you employ. The more pressure you place on your forced labor units, the more productive they will be, but the shorter their average lifespans will be. Also, you may notice that your policy toward forced labor affects your empire's unrest level.

Click on one of the two radio buttons to either allow or disallow the use of FLUs in your empire.

If you have allowed the use of FLUs, moving the slider to the right will increase their productivity by treating them more harshly. Moving it to the left will cause them to be treated better.

DEVELOPMENT PLANS

Using Development Plans is a quick and easy way for you to decide what gets built on a particular type of planet without having to micromanage every aspect of those planets' development. Each planet has two Planetary Classifications that are automatically established when the planet joins your empire. For example, your homeworld will typically default to "Core" and "Sweet Spot." New colonies frequently default to "New" (or "Newly Conquered," as the case may be). If a planet is short on food, it may switch to a "Starving" classification. However, you may change these classifications if you feel that a different development plan might better assist the citizens of that colony. (See Chapter Five, *Planetary Classifications Panel.*)

ADD NEW PLAN

To construct a new development plan, you must decide which planetary classification you are creating a plan for, what kind of policy you want to implement, and how strong an emphasis you wish to place on that policy. The three menus in this window will bring up your list of possibilities.

PLANET CLASSIFICATION

This menu brings up the types of planets for which you can set up development plans. Some examples of planet classifications include Core, Mineral Rich, Starving, Frontier, Trade, and Newly Conquered. In addition, there are five player-defined choices available for you to customize if you need additional classifications. Remember that a development plan will affect all planets throughout your empire that fall under the classification selected.

DEVELOPMENT POLICY

This button brings up a list of policies that you can instruct your viceroys to implement on your selected worlds. For instance, on planets classified as "Mineral Rich," you might want to set up a "Mining" policy. On the other hand, if any planet falls into the "Starving" category, you might want to set up a program emphasizing "Farming."

EMPHASIS

- **Primary —** If a policy is given a primary emphasis, viceroys will place the highest priority on meeting the requirements set in that particular policy as quickly as possible.
- **Secondary —** Policies with a secondary emphasis will be acted upon quickly, but the viceroys will not neglect their colonies' other needs.
- **Tertiary —** Tertiary emphasis on a policy means that the viceroys will take care of that policy only after their most immediate needs have been satisfied.

Note that a planet does not need to have all three emphases set, nor does a primary emphasis have to be set in order to establish a secondary or tertiary emphasis.

Once you have filled in your three settings, click on the Add Plan button below and the plan will be put into effect. You will see the plan appear in the Current Plans table to the right.

GAMER TIP: If you don't assign any specific Development Plans to a given Planet Classification, the viceroy will decide what seems to be best in each situation, taking into account the biodiversity, mineral richness, and preferences of your species. This might be just what you want. If it's not, create one or more Development Plans to fine-tune what gets built there.

CURRENT PLANS

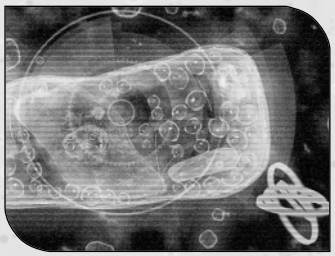
The Current Plans table allows you to view your current development plans and clear out any sections that you might not need or want anymore. The table is broken down into four columns: Planet Classification (the type of planet you have developed a plan for) and Primary, Secondary and Tertiary Policies (the policies with their respective emphases).

To delete a development plan, select a cell on the table and click on the Clear Selected, Clear Row or Clear All buttons below to delete the appropriate material.

GAMER TIP: Development Plans are a powerful means of getting what you want without taking a lot of time to manage the construction of every item on your planets. Use them any time you don't want to be bothered with the details. You can monitor what your viceroys are building and make changes as needed to fine-tune their actions. And you can always give them specific "zoning" instructions for each region of a given planet by using the Planetary Infrastructure panel.

THE ORION SECTOR PART IX

THE ORION DARK AGE



As was the Antarans' practice, indigenous races in conquered sectors were generally "squeezed" into extinction. They systematically stripped the Orion races of all technology and research capabilities, relocated their populations to their home systems, besieged them with orbital monitors, ghettoized them, and turned their worlds into work camps. The Antarans established their sector seat at Orion itself, and brutally managed the entire sector from there. They considered the creation of this new order in the Orion Sector to be their "Great Work," circumventing the Orions' experiments and bending them to the Antaran will, thus proving their superiority to their ancient enemy.

Historical Note: The Antarans have always been secretive. Theirs was known as a "black hole" civilization where, the saying went, all knowledge was sucked in but no enlightenment ever shone out. This policy of total secrecy and paranoia is one of the cornerstones of their society that has helped set them above everyone else they have encountered.

Although common Antaran practice would have seen the races worked to death, certain factors spared the Orion races from extinction. The Antarans'

old experiments, the Ichthytosians and the Ethereans, had progressed since their creation, and had certainly proven to be worth another look under the microscope. The other Orion races were also of similar interest, many of which were the creations of the ancient Orions and thus worth studying for clues as to what happened to the Orions themselves. Also, the more prudent Antarans felt that, should any Orions actually return, they may be more cordial to the Antarans if they found their experiments still in good hands.

Finally, there were the Evon. The Antarans could not trace their evolutionary path to the Orion Sector or the neighboring sectors, nor could they detect any recognizable genetic tampering. However, they had the same technology as the other Orion races, and thus proved to be a threat from another source. Though the Antarans did not connect them to the Mizara, they suspected that the Evon were the products of another civilization that might one day come looking for them.

During their reign of terror over the Orion Sector, the Antarans developed the Orion system and set up a TDP to facilitate transportation between the Antaran and the Orion Sectors. Jump lanes were also identified throughout the Orion Sector, and jump gates built to accelerate inter-system travel. Antaran colonies, military bases and research outposts were set up in various systems to establish a solid infrastructure and to maintain a close watch on their Orion conquests.

As Antaran geneticists studied the Orion races searching for clues to the ancient Orion mystery, they received permission to conduct experiments when necessary to assist their research. Soon these "experiments" consisted of wholesale genetic manipulation of entire populations, and no race was spared this final humiliating scourge. The Antarans altered the structures of every race in the sector in their quest for knowledge and their desire to manufacture better "living weapons." These experiments were scientific nightmares; the research and breakthroughs they provided came at the cost of millions of Orion lives and the transformation of every organic race in the sector. Even after only 1,000 cycles, the Orion races are no longer what they once were. The evil that was inflicted upon them was so terrible that no one would ever speak of it again.

Historical Note: During the Dark Age, many of the local Orion races developed myths and legends based on ancient tales of an heir to the Orion throne. Most of these stories depicted a messianic figure rising up to smite the Antaran overlords and restore the sector to its former glory. These stories gave the Orions hope for the future; however, with so many legends and tales surround the mythical heir, disagreement between the Orion races regarding the identity of the "true" heir would be yet another source of conflict within the sector...

THE COLLAPSE OF THE ANTARAN HEGEMONY

Around 19090 GC, the Antaran Hegemony suffered what seemed to be a massive population implosion that effectively collapsed its governmental structure. Within scant cycles, over 95% of the Antaran population vanished into nothingness. It did not appear to be an attack by an outside force, nor did it seem like an extremely virulent plague. And though the Orion races did not immediately see the sudden depopulation of the Hegemony, they soon noticed its effects, heard rumors from beyond, and started to wonder: What happened to the Antarans?

A popular tale among the Orion races is that the Antarans were finally defeated by their own methods of genetic manipulation and modification. Supposedly a

method was discovered to transform Antarans into beings of pure energy that transcended physical limitations. What began as yet another "black hole" governmental evolution and genetics research project leaked out to Antaran society at large when a clique of scientists defected from their secretive traditions and established cults of followers who desired to submit themselves to this "cleansing" transformation. These rogue scientists were quickly denounced by Antaran officials and, even more quickly, went underground where they were soon sought out by Antarans from every level of society. This process gained popularity through notoriety, and the slow trickle of Antarans who wished to be "cleansed" soon grew in intensity, as the cults spread to every world in the Hegemony, and more and more Antarans volunteered to be transformed. High born and low, old and young, the smartest, the bravest, and the "common man"— all vanished into energy. By the time the cultists vanished, destroying their transformers in the process, barely one Antaran in 50 remained behind.

In a cosmos filled with irony, and after playing dice with the universe through their experiments for so long, the Antarans' own number finally came up, and their own civilization brought to ruin by it.

But this tale is merely conjecture. The real reason for the rapid disappearance of the Antaran population is thought to be the greatest of the Antarans' innumerable secrets. It has become the talk of the sector. And in a time and place where knowledge is power, learning the mysteries of the Antarans has set many planet-bound eyes to gaze once again at the stars.

Historical Note: The Antarans were indeed done in by one of their research projects, but nothing as poetic as what the rumors pictured. The Harvester Project was the Antarans' quest for a biological agent that would infect most life forms and either kill them or render them mentally docile and obedient. It was a major endeavor, with dozens of research labs working on various facets of the project. And, in the end, the Antarans succeeded in breeding a parasite that did exactly what they wanted it to.

Several versions of the Harvester parasite existed, but the most notable one was the smaller, virulent horror known as Harvester Gamma that killed all life forms indiscriminately, Antarans included. Somehow this Harvester was released from its containment into several Antaran colonies, and it spread like wildfire. Billions of Antarans died in madness and agony as the parasites devoured their brains and sought new hosts to consume. The Hegemony restricted TDP travel in an effort to protect their territories outside the dimensional barrier, but not soon enough. The only silver lining was the fact that, lacking fresh hosts, the Harvesters quickly starved to death. This, unfortunately, happened only after 98% of the population of the Antaran Sector had been slaughtered. Those few who survived the scourge banded together and left the Antaran Sector. Where they went is as yet unknown.

The Harvester plague devastated several other Antaran colonies outside of the Dark Zone, but the Orion Sector remained mostly unscathed. This would soon change, however.

The question of who released Harvester Gamma into the wild would also never be answered. Some suspected a disgruntled Antaran scientist; others suspect an accident at the lab; and some believe that Loknar returned to bring down the Antarans once and for all...

CHAPTER NINE: PERSONNEL

The Personnel tab enables you to govern some of the highest and lowest profile individuals in your entire empire: your High Council of leaders, and your covert operatives.

LEADERS

The Leaders screen presents you with the current members of your empire's High Council. Over the course of time, talented individuals from across the galaxy may offer to join your ranks. Their skills affect your entire empire, so even a slight advantage can be significant. However, as high-profile individuals, they are also vulnerable to attacks by hostile spies from other empires. They should be protected, even as you should be making efforts to deprive your enemies of their leaders with your own agents.

On the left half of the screen you can survey all the leaders in your High Council. Each leader is described by a portrait, their name, and one to three icons describing the effects they have on your empire. You can only have four leaders in place at any given time; the fewer leaders you have, the higher the chances that one will offer their services to you. If you feel that a given leader is not beneficial to your empire, click on that leader's portrait and then click on the Dismiss Selected Leader button at the bottom of the screen.

GAMER TIP: Leaders will not offer to join your empire if you have no place for them. Firing a weaker leader may open a space for a more powerful individual to sign up...

Clicking on a leader's portrait brings up the Selected Leader Info screen on the right. Here you can find more detailed information on the leader's background and the exact modifications this background will impose on your empire's productivity. Note that each leader can have up to three different effects on your empire. Most leaders contain both a beneficial and a detrimental modification. In addition, some leaders may require payment in the form of a percentage of your Imperial Tax Revenue. This cost varies from leader to leader, but if you're employing the most talented individuals in the Orion Sector, be prepared to pay up to 10% of your income to support their needs!

GAMER TIP: Leaders usually do more good than harm. But a strength in one area is usually accompanied by drawbacks in another. Take a close look at each leader to make sure his or her advantages outweigh the disadvantages for your particular empire. For instance, if you need to catch up on Research, then a leader who brings down your Research percentage may be devastating, regardless of how much they might add to your Industry output.

ESPIONAGE

The Espionage screen is your window into the shadowy world of intrigue and covert operations. Here you will train spies to go out and gather information, sabotage enemy fleets, disrupt other empires' economies, and even strike at the highest branches of their governments.

SPY RECRUITMENT

This is where spies are trained. Each spy is trained for a specific kind of mission, as listed in the Primary Mission Circle field: Military, Political, Economic, Social, Diplomatic, and Scientific. Once you have selected the type of spy you need, click on the Recruit This Spy Type button. The spy will appear in the training activity box below. You may queue up to four spies for training at a time. If you wish to remove a spy from the training list, select the spy in the training activity box and click on the Delete Selected button below.

AGENTS IN THE FIELD

This panel will list all the empires you have infiltrated with your spies. The target empire's Flag will be shown, followed by the number of agents you have operating within their borders. If for any reason you wish to remove all your spies from a particular empire, select the empire and click on the Recall Agents button below. Your spies will be given the recall order and will attempt to extract themselves safely.

LIST OF SPIES

Once a spy has been trained, the code name will appear in the list of spies, along with their mission circle. Selecting a spy will bring up the Selected Agent Information window. Here you will see a portrait of the spy, the name, mission circle, current activity, and current orders, as well as four primary statistics. These are:

- **Cloak —** a spy's ability to hide and remain undetected
- **Dagger —** a spy's ability to perform a covert action
- **Luck —** how much random chance helps a spy to succeed
- **Loyalty —** how dedicated the spy is to your cause

These statistics change over time as a spy gains more and more experience through successful missions, or is broken and beaten as a result of mission failures.

To send a spy into the field, select the spy and then click on the Insert Spy button. A list of possible empires will appear, and you may choose the empire that you want that spy to infiltrate. If a spy is successfully inserted, a mission will automatically be chosen based on expertise. Theft of technology, disruption of enemy research projects, incitement of social unrest, destruction of planetary facilities or military units, and even the assassination of enemy leaders are just a few of the possible missions a spy might undertake.

After years of service, a spy may voluntarily resign from duty. A spy might also resign after having too close a call with the enemy (assuming they weren't executed on the spot). If you wish to prematurely terminate one of your agents, select the spy and then click on the Retire Agent box below.

GAMER TIP: You can protect yourself from enemy spies (to an extent) by increasing the setting of the Oppressometer in the Empire screen. However, you'll have to deal with increased unrest in your own empire as a result, so you need to be careful not to set it higher than necessary.

THE ORION SECTOR PART X

THE END OF ANTARAN RULE

One of the Hegemony's last mandates was the establishment of a new policy throughout Antaran territory: destroy every vestige of their civilization among its abandoned colonies and outposts so that no others could follow them or learn their secrets. True to their nature, the Antarans maintained their "black hole" philosophy right up the very end of its days as many enclaves of stored Antaran knowledge were destroyed, colonies abandoned and pulverized, and populations withdrawn to places unknown.

But not all of the Antaran population was gone. Although the depopulation effect completely emptied the Antaran Sector and several neighboring sectors, it was far less drastic in the more outlying areas of the Hegemony, including the Orion Sector. The Antarans in command at Orion, now suddenly cut off from any supplies and reinforcements from their home sector, had enough foresight to see the writing on the wall. They had just spent 1,000 cycles in brutal domination of the Orion races, exploiting, torturing, experimenting on, and slaughtering them. Now their positions were reversed: they themselves were severely weakened, and perhaps vulnerable to a resurgence by the Orion races. They needed to change their policies in order to maintain control over the sector.

Transforming themselves from tyrannical dictators to "enlightened" believers in representative rule, the Antarans in the Orion Sector rebuilt and reconvened the Orion Senate. Inviting those races whose homeworlds were fairly close to Orion itself (several jump lanes distant at most) and ignoring those on the outskirts of the sector (and beyond the now weakened range of the Antaran military forces in the sector), the Antarans announced the establishment of a new government in the Orion Sector. For the first time in a millennium the lights in the ancient Senate chamber burned brightly, and the voices of Orion and Antaran representatives filled the halls. Many of the Orion races were optimistic of such an event, willing to forget the horrors and atrocities of the Dark Age and focus instead on a newer and brighter future.

But not everyone was willing to forget the Antarans' deplorable past.

THE FIRST MEETING OF THE ORION SENATE

It was a very delicate occasion when the invited representatives of all of the local Orion races convened once more in the Senate in 19097 GC. The Antaran presence was unmistakable — among the guards, packed in numerous seats among the delegates, and most noticeably occupying the highest seat of all, that of the President of the Orion Senate. Their pitiless features provided sharp contrast to the palpable optimism in the air that exuded from almost all the other members. The long oppressed indigenous Orion races brought their hopes to the Well of the Senate, and when the first session had ended, they had left them there in tatters.

The occasion began with enthusiasm among the Orion races. After centuries of Antaran-imposed isolationism, the Ambassadors from the local Orion races met each other with wide-eyed amazement: the stories their elders had told about the cosmopolitan nature of the Orion Sector were all true! The reunion of former allies and adversaries became a recounting of ancient history, of the 17000s, of something called the Pax Humanica, and of the horror stories of the Dark Age. While this reunion played out in the Senate's Imperial Lounge, the Antaran representatives interacted little and seemed to be bored by the whole event.

Finally, the speeches warranted by the occasion began. Negotiations beforehand had decided that the Antarans would speak last to close the first session of the Senate. Canny negotiators to the end, the Humans arranged to open the meeting, with Ambassador Shain Alegna delivering a stirring oration on the "beginning of a bright new age for all Orions." Her speech was applauded by all the delegates (with the notable exception of the Antarans), and was followed by several other salutatory addresses from the Ambassadors. That is, until the leader of the Mrrshan delegation stood in the Well.

MRRSHAN DIPLOMACY

Ambassador Rrlenn looked resplendent in her meticulously pressed Mrrshan fleet officer's uniform (a fleet only recently commissioned by the Mrrshan to patrol against pirates under the new Antaran policy of replacing their own dwindling manpower with skilled local inhabitants). Her scarred face, partially hidden behind an eyepatch, was upheld in an aura of nobility. When she spoke, she bared fangs of utter contempt. Passionately, forcefully, and with a patrician's rhetorical skill, she denounced the Antarans and their past deeds. Here was a warrior who had chosen the Senate to be today's battleground, and her devastating verbal surprise attack on the Antarans had its impact.

The Antaran delegation remained expressionless as they listened to the entirety of her haranguing. As she closed, there was a long moment of silence, and then a Bulrathi officer demanded to be heard next. His blunt soldier's berating of the Antarans underscored the fact that the Bulrathi stood united with the Mrrshan in their contempt of their treatment by the Antarans for the past millennium. The Elerian Senator, when she finally spoke, was clearly moved by the Mrrshan speech, and added her thoughts on the matter of Antaran atrocities committed against the local Orion races, citing their influence in the Elerian Gender Riots and the atrocious Mind Worm plague the Antarans had inflicted on their population during the Antaran War.

Though these three speeches were the most direct in their assault on past Antaran actions, other negative notes were heard in the speeches of the Gnolam, Alkari, and Darlok representatives. Throughout it all, the Antaran delegation sat unmoved, unflinching and, apparently, uncaring.

CHAPTER TEN: FOREIGN OFFICE

The Foreign Office tab will bring you into the political arena of the Orion Sector, where you can negotiate with your neighbors for trade, declare war, sue for peace, or even vie for control of the august Orion Senate itself.

DIPLOMACY

In this window you will see portraits of the ambassadors of any empires that you have diplomatic contact with. At the beginning of the game, there may be very few, if any, portraits here, as you may not be in close proximity to other empires. However, if you start off as a member of the Orion Senate, then you will see portraits for all other members, regardless of their proximity to you.

If you wish to contact one of the other empires and initiate a diplomatic exchange, you may double-click on their ambassador's portrait to enter the negotiations screen. Alternately, you may select the portrait and then click on the Initiate New Diplomatic Exchange button below.

If one of the other empires has sent you a message, a note will appear on that portrait. Again, double-clicking on the portrait will display their message, or you may select the portrait and click on the View Incoming Messages button below.

NEGOTIATIONS

If you are initiating a diplomatic exchange with another empire, the following options are available.

Pronouncements:

Threat
Threatening another empire will strain relations between your two empires, but it might convince them to back off, or offer you a gift or tribute, or stop spying on you. On the other hand, it might push them over the edge and incite them to break their treaties, impose sanctions, or go straight to war.

Impose Sanctions/Embargo
Imposing sanctions and embargoes will hurt the target empire economically. The full effect depends on how much your empire trades with theirs, so it is generally most beneficial to you if your empire is more financially stable than theirs. Again, this will strain relations significantly between your two empires.

Declare War
The ultimate statement of hostility, a declaration of war removes all treaties and sets your ships to attack any vessel or colony belonging to the target empire on sight. Keep in mind that a declaration of war may have serious consequences, especially if they can draw their allies into the conflict. Consider any decision to begin a war with another empire very carefully, and consult the Foreign Matrix to find out who your enemy's friends might be.

Treaties:

Non-Aggression Pact
This treaty, when accepted, orders all ships of both empires to allow the other to pass and to not attack unless fired upon first. This is very useful when fighting a common foe if you must both move through common star systems to get to your destination. It is also useful early in the game, when you are still exploring and have not yet built up your military to the point where it is ready to fight a war. It is the first step toward more advanced arrangements such as Trade Agreements.

Military Alliance
By forming a Military Alliance, you agree to support the other empire in the event that their ships are attacked and you have available resources in the same system.

Full Alliance
A Full Alliance will cause both empires to defend one another militarily to the greatest extent practical.

Trade Agreements:

Economic Trade Agreement
By establishing an Economic Trade Agreement with another empire, you increase the AUs brought into both empires through trade. The amount of trade depends on the size of both empires. While such treaties are beneficial in the long run and can gradually bring both empires closer diplomatically, they are expensive when first formed. Therefore, establishing an Economic Trade Agreement when in a poor financial situation can hurt an empire more than it can help it. But as time progresses, the cost drops until the agreement finally begins paying for itself.

Research Trade Agreement
Similar to the Economic Trade Agreement, a Research Trade Agreement promotes a sharing of research information between two empires, resulting in additional Research Points for both. The number of additional Research Points generated depends on the size of both empires. While such treaties are beneficial in the long run and can gradually bring both empires closer diplomatically, they are expensive when first formed. Therefore, be careful to analyze the costs before entering into such an agreement, especially early in the game. In time, the cost of the agreement will drop, and the benefits will become apparent.

Exchanges:

Gift
You may offer a gift of AUs, planets, or technology to another empire. This can improve relations between your empires, depending on the value of the gift.

Trade
You may attempt to exchange various items with another empire. Technology, planets, and diplomatic actions are among the items that can be traded.

Demand
You may demand "something for nothing" from another empire. Most empires will react negatively to such a stance; however, some races have respect for such aggressive diplomacy.

RESPOND TO A DIPLOMATIC MESSAGE

If you are responding to a message from another empire, the following options are available.

Refuse
This is a flat-out refusal for whatever the other empire might be proposing.

No Answer
A diplomatic version of the cold shoulder could be seen as contempt by some. On the other hand, some empires might revise their offer to make it more appealing to you.

Stall
A more polite delaying tactic than No Answer, your diplomats hem and haw in the hopes that a better offer might come along.

Counter-offer
You take the initiative and revise their offer for them. A good deal for you if it works.

Accept
You agree to the terms offered.

Before clicking on the Send Offer button, you must place an emphasis on your statement. The Emphasis For This Action button provides you with several choices on how you wish your statement to be conveyed, from humble begging to demanding arrogance. This emphasis can have varying effects on how the opposing empire treats your request.

GAMER TIP: Being nice isn't always the best policy. Some races view politeness as a sign of weakness and will try to exploit it, or just ignore it completely. The Sakkra, for example, tend to respond best when your diplomatic entreaties are relatively unemotional or even aggressive in tone. The Trilarians, on the other hand, would be quite offended by the same offer.

ORION SENATE

In the Orion Senate, the superpowers of the Orion Sector, under the watchful and dominant eye of the New Orions, meet to discuss matters of galactic importance. The Lex Galactica (the laws of the galaxy) are proposed and voted upon in the Well of the Senate, and many interracial grievances are laid out in front of the Senate's members for discussion.

LAWS
Any items of the Lex Galactica are listed here. These are extremely binding mandates that affect all members of the Senate. Violation of these laws will bring swift retribution from other Senate Members. Of course, for those who are not part of the Senate, these laws mean very little...

BILLS
Members of the Senate will often propose bills for the Senate to vote upon. These bills range from commendations to condemnations, the imposition and lifting of sanctions, the addition or expulsion of members of the Senate, and even a group declaration of war against a particular empire.

Propose New Bill
If you wish to propose your own bill for the Senate to vote upon, open the Propose New Bill panel. This will bring up a list of possible bills for you to choose. Once you have chosen a particular agenda, you may then select which empire will be the subject of the bill, and then you may submit the bill to the Senate.

The following procedure applies to every bill brought before the Senate.

Proposal
The bill is proposed, as described above. It will reach the Senate floor the following turn.

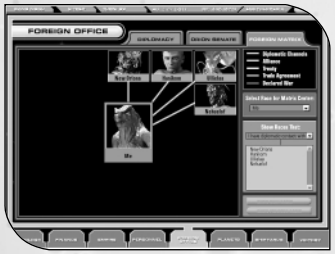
Seconding of the Motion
The bill must be seconded by someone other than the ambassador who initiated the motion.

Voting
After being seconded, the bill can be voted upon. The possible votes are yes, no, or abstain. You may also postpone your vote, primarily to negotiate with the bill's initiator to see what that empire would give you in exchange for your vote in support of their bill...

Conclusion
The bill is passed or rejected, based on how the Senate members voted.

You can see the status of each bill currently in process by the icon next to the bill and the color of the text of the bill. Green text means that the bill has just been proposed or seconded. Yellow text means that you have voted on it and it is awaiting completion. Red text means that the bill has been voted on and accepted or rejected.

FOREIGN MATRIX



This screen gives you a quick look at the empires in the game and their current diplomatic relations with all other empires. At first, you will see your representative's portrait in the center of the screen, with colored lines connecting to the portraits of all other empires that you are currently in contact with. The color of the lines indicates the current state of relations between your two empires. A pale blue line indicates regular diplomatic channels; a yellow line indicates an alliance; a white line indicates a treaty; a green line indicates a trade agreement; and a red line indicates war.

You may have several active relationships with a single empire. This screen will display the dominant relationship in the main display. In the Show Races That: box in the lower right you can specify the kinds of relations you want to see, if, for example, you wanted to see all races that you were at war with.

You can also change the empire in the center of the screen by choosing the race you wish to survey in the Select Race for Matrix Center list. Their portrait will appear in the center, along with lines indicating their relationships with other races.

THE ORION SECTOR PART XI

THE NEW ORIONS ARE BORN

The President of the Senate rose to give the final speech of the Senate's opening session. He declared that the Orion Sector was now no longer aligned with the Antaran Hegemony, and that they were establishing their independence then and there (interestingly, the huge ovation that announcement received still had no outward effect on the stoic Antaran delegation; they remained as expressionless as they had during the brutal diatribes given earlier in the session). To underscore this, he declared that they had adopted a new moniker, and would thereafter be known as the New Orions.

The speech went downhill from there. Ominously, it ended with an affirmation that the New Orions would remember the words spoken by the Mrrshan, Bulrathi, Elerian and other representatives, and that a formal reply would be forthcoming separately to each of their home worlds.

THE NEW ORIONS TAKE CHARGE

The New Orions had, of course, been preparing for this step for several cycles already. Having heard nothing more from Antares since the policy regarding the destruction of all Antaran outposts, the New Orions decided that the Hegemony was no longer a functional entity, and thus ignored the command. Instead they raided whatever outposts they could find, pillaging their resources and withdrawing them to a core radius around Orion. Other equipment was left in place as is, including the "prison monitors," those ships and satellites set in orbit around the homeworlds of the lesser races to keep them duly repressed and firmly under Antaran control. The New Orions had already begun making deals with their "locals" to share the manpower burdens required to help combat piracy in the Orion Sector. They felt that it was worth the risk to keep their prison monitors in place for the time being to help counter the increasing power being yielded to the locals.

But with the ominous words spoken during the first session of the Orion Senate, the New Orions realized that a revolt against their "New Order" was forthcoming, and they were worried. By 19098 GC, the Mrrshan had discovered the ease with which they could capture the prison monitors around their world, and quickly shared that information with the other sector races. Before the cycle was over, the Alkari, Darloks, and Elerians had also seized the monitors orbiting their homeworlds. Knowing that they were not yet ready to confront the rebellious locals, the New Orions cynically "granted as a gesture of goodwill" their remaining monitors to all of the Orion races that had not yet bothered to capture them.

The New Orions spent most of 19098 GC organizing their Great White and Great Crimson Fleets (being their new colors of leadership and strength) and fortifying their territory around Orion while the indigenous Orion races that were openly revolting prepared their own hasty defenses. The local Orion races did not know it, but the New Orions were afraid of them; had this knowledge gotten out, the following war might have gone much differently...

Though the New Orions had rejected Antaran rule, they certainly had not changed their inner Antaran natures. Their strategy was to dominate the troublemakers by force and thus cow the rest into submitting to their "benevolent" leadership. They knew they had to strike quickly; the local Orion races were building up their fortifications and their fleets, and gaining strength with every passing day. Also, they had no idea what had happened within the Antaran Sector, and thus chose to prepare for either a retributive strike from Antares for their insubordination or an attack by a new enemy that had somehow defeated the Hegemony forces within the dimensional barrier. Therefore, they prepare for fighting on two fronts. The Great Crimson Fleet was assembled with a small number of the best ships and crews that New Orions could assemble. This fleet was held in reserve at Orion with a three-part mission. First, they were to oversee the construction of a brand-new Guardian ship. Second, they would be the first line of defense against an incursion from the Antaran Sector. And third, they were to launch raiding parties into the Antaran Sector through the TDP at Orion to steal supplies and equipment to shore up their power base, as well as to investigate the disappearance of the Antarans. This was a particularly hazardous assignment, as the TDP at Orion was suffering from severe lack of maintenance, and it was expected to break down completely from disrepair sometime soon.

Historical Note: Rather than destroying the last vestiges of Antaran civilization during the time of their population implosion, the New Orions gathered the most valuable secrets and research projects they had and stored them in a hastily built Guardian ship. This Guardian, along with the Great Crimson Fleet, was designed to protect their positions of power in the Orion Sector and to insure their rule for cycles to come. The Great Crimson Fleet played an important role in securing the required components and technologies used in its construction.

The Great White Fleet, on the other hand, was put together out of "everything else"— police cutters, old transports, museum pieces, and the dregs of the New Orion Navy. With only a handful of true Antaran warships to provide it with a solid steel core, the Great White Fleet was forced to accept critical weaknesses in certain ship classes. Thus, anything that could make a hyperspace jump was fitted with whatever weapons could be slapped on and brought into the fleet. The Great White Fleet was put under the command of a loyal New Orion Grand Admiral named Kelath H'vei, whose specialties were training, discipline, and fanatical attack. By the end of 19098 GC, the Admiral had transformed a motley rag-tag group of scowls, derelicts, and impressed crew members into eight small, efficient task forces of rabid attack beasts.

CHAPTER ELEVEN: PLANETS SCREEN

The Planets screen will allow you to sort and view all the planets that your empire knows about at a glance. It provides a quick, convenient summary of key facts about the places that are most important to you. It can also be used as a navigation screen: simply double-click on the planet you'd like to move to, and you'll go straight to the Planet screen.

The player in control of the planet will also be shown, as well as the racial breakdown of the planet's population.

OVERVIEW

In this screen, you'll see a compact display of key facts about each selected planet.

TERRAFORM ZONE

Right next to the picture of the planet is a vertical bar with red, yellow and green stripes. This is a compact version of the Terraforming Zone display on the Planet screen. It shows the habitability of the planet from the viewpoint of the species shown in the "View By" drop-down at the bottom of the screen; typically, this is the species that's most populous on that planet. This is one critical indicator of the desirability of this world, but not the only one.

UNREST

Three icons indicate the Unrest status of this planet:

Green Thumbs Up	Happy
Yellow Waving Hand	High level of unrest
Red Fist	Currently in revolt; you're no longer in control

STATISTICS FOR UNCONTROLLED PLANETS

If the planet is not currently under your control, you'll see three items displayed in the next box: Gravity, Fertility, and Minerals. Each of these tells you a little bit more about whether this is a good world for your species. The wrong gravity can of course be a problem, but a low fertility will be an issue unless you have plenty of food elsewhere or are a mineral-eating species.

STATISTICS FOR YOUR PLANETS

If the planet belongs to you, you'll see a different set of displays. First, you'll see the unrest level. This is color-coded and also shown as a number for easy reference. Then you'll see a summary of the planet's output of Food, Minerals, Industry, and Test Tubes. These will show you, at a glance, which parts of that economy are strong and which are weak. The total AUs produced on that planet in the last turn will also be shown.

POPULATION

Finally, the last box on the line shows how many inhabitants live on the planet, compared to the maximum.

SORTING PLANETS

PRIMARY AND SECONDARY

You can choose to sort your planets in order of the attributes that are most important to you. For example, you can tell this screen to put all of the most habitable planets at the top of the list. These two drop-down menus let you select a primary sorting characteristic and then a second one within that, if desired.

VIEW BY

Usually, you want to evaluate the "value" of a planet based on whichever kinds of creatures are living there. That's the default setting, called "Dominant." But there are some cases when you'll want to look at the list of planets from the perspective of a particular species. For example, you might want to review all of your planets to see which ones are most interesting to an Insectoid race, to get an idea of where your Klackon neighbor is most likely to attack you. Or, you may want to find only those worlds that are best for migration of your species and not for the forced laborers you have on captured planets.

FILTERS

This screen also contains a number of check-boxes that allow you to further fine-tune which planets are shown. Most are self-explanatory. The purpose of these is to restrict the number of planets shown so it's easier to find the information that you want. For example, you'll usually want to look just at the planets you own. But sometimes you will want to look around at other planets in those same systems, to see where you want to build a new colony. In that case, you'd simply un-check the "Owned Planets" box and would then be able to look at every planet in every system that you currently know about.

ORDERS PANEL

SEND COLONY SHIP

When you issue this order to a planet, it will request that the nearest colony or outpost task force available be sent to colonize this planet. If there are none available, a new one will automatically be built and sent from the nearest available Deployment Center. This will occur regardless of whether the Colonization AI setting on the Empire screen is On or Off.

SEND OUTPOST SHIP

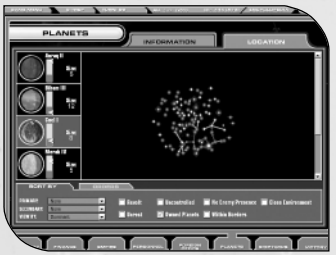
They are a "colony" ship (think of them as a penal colony, like the way Australia was started). They represent 1/4 population point, they can grow into a colony (1 full population point), and when they do they are automatically granted a military DEA. They also "Lay Claim" to a System; in other words, races you are friendly with will avoid the system because you've "laid claim" to it.

You can also set a MIGRATION policy to get more people to go there. Bear in mind that Outposts grow VERY slowly. It's not really cost effective but great for colonizing RED or YELLOW mineral rich systems or systems that have great SPECIAL but have HOSTILE environments.

SET MIGRATION

Sets this planet as a high priority for migration. This is the spacefarer's equivalent of offering "40 acres and a mule" to new settlers. While this will not pull people automatically from another planet, it will highly encourage any that are automatically moving to consider this planet as a likely candidate. This policy remains active until you either turn it off or the planet is overpopulated.

LOCATION PANEL



When you select the Location panel, planetary detail will be stripped away and a Galaxy Mini Map will replace the screen, allowing you to pinpoint where that planet is in relation to your empire. Clicking on each planet on the left side of the screen will show where that planet is on the Galaxy Mini Map and is denoted by a reticule over the Star System it belongs to. Just like the Information panel, you can sort in any way you wish, and you can zoom in on a planet by double-clicking on the planet icon on the left.

THE ORION SECTOR PART XII

THE NEW ORIONS STRIKE BACK

The ominous "formal reply" that the President of the Senate had promised to deliver to the dissenters' homeworlds was delivered starting in the early part of 19099 GC by the Great White Fleet, and that reply was xenocide. Grand Admiral H'vei had orders to wipe out those civilizations who had spoken out against the New Orions, and he had honed the Great White Fleet to be the perfect instrument for the task. The fleet possessed a far superior technological base than what it was expected to encounter, and all its war game simulations projected no significant casualties during the upcoming campaigns (those few simulations that did project the actual casualty rate were disregarded as being statistical anomalies).

H'vei began his campaign with the Gnolams, whose pathetic show of resistance (accompanied by a laughable attempt to bribe the Admiral) served as little more than a useful training exercise for the fleet. With each cycle, another engagement drew to a close, as the Great White Fleet annihilated the Bulrathi next, then the

Elerians, and then the Mrrshan. Their homeworlds were utterly devastated in a display that the New Orions thought would serve as an example to the other local races. All that remained of those once proud races were a smattering of refugees and whatever lost tribes and outposts they had, rumors say, managed to keep alive and hidden during the Dark Age.

After the completion of the Mrrshan engagement, H'vei took most of 19103 GC to repair and resupply his fleet. The attrition that the Great White Fleet had suffered was greater than original predictions had estimated, as the Elerians and the Mrrshan had fought with a surprising strength and tenacity that had not been expected. It was during that cycle that the Alkari and the Darloks managed to successfully evacuate large numbers of their people, as well as precious cultural artifacts, offworld and out into deep space. H'vei returned to his campaign with renewed vigor, destroying the remaining Darloks in 19104 GC and the Alkari in 19105 GC, thus completing the War of Example that the New Orions had intended. The Great White Fleet returned to Orion to await further orders.

Historical Note: Everyone knew that the Great White Fleet had suffered some attrition during their campaign of retribution. What was not known was the extent of those losses and the fact that they were almost irreplaceable because of the denuded population and industrial base of the New Orion empire itself. In truth, the ability of the Great White Fleet to project massive offensive power is gone.

While the idea of the Great White Fleet suffering attrition may seem surprising at first, a closer look at what was going on at the time would leave one asking not why did they suffer *any* attrition, but rather how did they escape with such *light* attrition. A popular Gnolam saying went, "The only thing more costly than a battle won is a battle lost." Even if H'vei's fleet had crushed its opponents with barely a scratch, it still expended resources to do so — missiles, crew supplies, basic maintenance, etc. All the things that get used and abused in battle and all the things that require adequate logistics were expended without a ready supply of replacements available.

Naturally, the New Orions kept that (like they kept most other) information to themselves, yet another closely guarded secret. They purposefully projected an aura of absolute military supremacy; however, the indigenous Orion races had secretly begun to question the New Orions' combat readiness. Even as the local Orion races were building up their defenses and preparing to push out into the sector once more, the New Orions continued to let spoken and unspoken threats of xenocidal retribution hang in the air of the Senate as they struggled to reacquire sufficient military strength to effectively carry out such threats again. This questionable state of readiness of the New Orion Navy was yet another facet of the dangerous game the New Orions were playing.

The Orion Sector Rises Again...

The New Orions had made an example of their detractors, and their point was crystal-clear to the remaining civilizations in the Orion Sector. With hostilities finally at an end, the New Orions and the indigenous Orion races met in the Senate to debate, and occasionally even decide, on matters of sector-wide importance. One of the most important of such legislation was the NBC Ban of 19110 GC, being a simple ban on the use of nuclear, biological, and chemical weapons. This item of the Lex Galactica was beneficial to both sides — the indigenous Orions wished to appear less threatening to the New Orions and keep civilian casualties to a minimum should another Orion Civil War be in their future, while the New Orions wished to keep their own limited population safe.

Although the Senate was a place for debate and communication, there was no doubt about who had the true power. The New Orions remained firmly in control over the part of the Orion Sector within the Senate's military range (the *Senatus Imperium Ultimum*, a radius of several jumps from Orion). They played the ethnic Orions against each other, protected their positions of power within the Senate, and continued to offer the threat of military retribution when it served their interests to do so. Their influence remained strong, and their will frequently set the tone for policy throughout the sector, but the natives were getting restless. With the waxing indigenous races of Orion before them and the waning Antaran Hegemony behind them, the New Orions were sitting very uneasily on the fence between the two.

As the Senate brought the Orion Sector together once more, the reestablished contact enabled many of the indigenous Orion races to remember the past, times before the New Order, times before the Dark Age, when they were masters of the sector, and their empires spanned the skies. The embers of an Orion renaissance were beginning to glow again. And their questions drove them harder, faster, higher, for they knew that knowledge would give them power. How strong were the New Orions? What happened to the true Antarans themselves? What secrets lay buried in lost Antaran and Orion colonies? What of the stories of the Orion races' glories during the legendary Pax Humanica? And was there something even before those ancient times?

CHAPTER TWELVE: SHIPYARDS

This is where you make your decision on what kind of ships you want to build. Ships are *always* designed to fulfill a particular role or mission, and your Leader will always use the best available technology and equipment for that mission type. Click on the Ship Design icon to expand the panel. The Shipyards screen is broken up into 4 sections; Ship Orders, Name/Ship Info, Capacity, Items/Components.

The ship design screen is where you come to make new ship designs and to review existing designs. There's a lot to do, but it's really fairly straightforward once you are used to it. Here is a quick overview of how everything works:

When you first bring up the Shipyards screen, it defaults to a new design with the same parameters as the ship you most recently designed. There are two ways to use this screen.

First is to let the AI design a ship for you. You simply tell it what sort of ship you want using the SHIP SIZE, SHIP CLASS and SHIP MISSION drop-downs and STEALTH checkbox, then hit the AUTO-BUILD button. The AI will use those parameters to design a ship to fulfill that mission type. You are then able to go in and edit that design if you want to adjust something that it did.

The second way to design a ship is from the ground up. This follows the same procedures as letting the AI design the ship, but instead of using AUTO-BUILD, you have to add in the ship systems you want using the WEAPONS, ENGINES, DEFENSE and SPECIALS buttons to the left of the display.

Ship Size selects the basic size of the ship, as measured by hull volume. The bigger the ship, the more expensive it is to build, but the more internal space it has for carrying things like weapons. However, many systems such as Jump Drives or Shield Generators will scale based on the size of the ship — the bigger the ship, the bigger these systems have to be. Other systems, such as weapons, have fixed sizes, and these are where the larger ships really come in handy.

Aside from a few special items such as Colony Pods, any item can be put on any ship. Some very small hulls can't hold certain types of equipment because its base size is too big. But, as a general rule, the main reason for building a particular ship is that you can put just the right amount of stuff in it to make it worth the AUs.

Ship Characteristics

A ship's class determines its function. Ship engines and sizes are as follows.

STARSHIPS

Starships are built with Jump Drives allowing them to traverse open space as well as use Jump Lanes. These are the standard vessels in the fleet.

SYSTEM SHIPS

System Ships are slightly larger than Starships and do not have to have Jump Drives installed, leaving more room for optional equipment. While they cannot traverse interstellar distances, these vessels are excellent for defending systems you have colonized.

ORBITALS

Orbitals are even larger than Starships and also do not have Jump Drives installed. They must still have engines, since these act as the power source for the Orbital. Orbitals are essentially stationary in combat, staying in fixed orbits around planets or moons. They are thus more vulnerable than either Starships or System Ships, so be sure to add enough defensive systems when designing one.

STEALTH

Stealth is a special option. Stealth ships are smaller than other ships of the same Size and Class, but are harder to detect and target in both Combat and Non-Combat situations. There's nothing quite like the experience of seeing a Stealth flotilla arrive unannounced in your home system.

SHIP CLASS

Not surprisingly, ships come in a variety of sizes, from the smallest Lancer to the most fearsome Leviathan. There are 14 classes each of ships and orbital platforms, but only 7 ship graphics and 3 platform graphics for each species.

SIZE VALUE	SHIP TYPE	ORBITAL TYPE
01	Lancer (1)	Defense Sat (1)
02	Cutter (1)	Light Defense Platform (1)
03	Corvette (2)	Defense Platform (1)
04	Frigate (2)	Heavy Defense Platform (1)
05	Destroyer (3)	Light Monitor (2)
06	Light Cruiser (3)	Monitor (2)
07	Cruiser (4)	Heavy Monitor (2)
08	Battle Cruiser (4)	Star Base (2)
09	Dread Cruiser (5)	Heavy Star Base (2)
10	Dreadnought (5)	Battlestation (3)
11	Battleship (6)	Heavy Battlestation (3)
12	Titan (6)	Star Fortress (3)
13	Behemoth (7)	Heavy Star Fortress (3)
14	Leviathan (7)	Citadel (3)

WEAPONS PANEL

Weapons come in three basic varieties: Direct Fire, Missiles and Fighters. These are discussed in their own sections.

DIRECT FIRE WEAPONS

Direct Fire Weapons are further broken down into four different types: Beam, Particle, Mass Driver and Fusion. Typically, Beam weapons have the longest range but the lowest damage potential. Particle weapons have slightly shorter ranges, and do slightly more damage than Beam weapons. Particle weapons also tend to have an advantage when it comes to penetrating shields. Mass Driver weapons tend to do slightly more damage than Particle weapons but have a shorter range. Since they are flinging physical projectiles, they have the advantage of not having damage decrease at longer ranges. Fusion weapons have the shortest ranges but deal considerably more damage and tend to hit more easily due to their large area of effect.

When designing a Direct Fire Weapon, first choose the base weapon, say a Laser Beam or Fusion Cannon. Then you can select from a variety of Weapon Mounts and Weapon Modifications (assuming you have researched any of these).

Weapon Mount

The Weapon Mount (ranging from Point Defense to Ultra Heavy Spinal Mount) has a number of effects on the weapon. In general, the bigger the weapon mount, the greater the damage the weapon does. However, bigger weapons tend to fire less often than smaller weapons. The biggest weapons is the Spinal Mounted, which has an even greater effect on Target Selection and Fire Rate due to limited maneuverability (Spinal Mount means that the weapon always points in the same direction as the front of the ship). Weapon modifications are individual to each weapon. Some weapons have modifications (mods) that increase Fire Rate, while others have mods that increase their range or accuracy. No weapon has more than six mods available to it.

MISSILES

Missiles have less variety than Direct Fire Weapons, but have a longer range and tend to pack more of a wallop than the equivalent technology level of Direct Fire Weapons. They tend to take more space as well, and have a limited number of volleys that may be fired during a combat. Missiles are perhaps best used as planetary defenses, where the number of volleys per combat is essentially unlimited.

To design a missile, you first pick a Warhead. This is the core technology and determines all the base characteristics of the missile. You then select a chassis from the available options — smaller chassis' tend to fire more quickly but do less damage, while a large chassis reduces firing rate but increases damage potential. You may also select Modifications that do a variety of things based on the Chassis and Warhead you have selected.

GAMER TIP: the best defense against missiles is a strong point defense. If your opponents have missile capabilities, you'll probably want to be sure to build some point defense ships and place them in the outer rings of your task forces. Their highly maneuverable lasers with rapid firing rates will help take out the enemy missiles before they get close enough to do their damage. Another approach would be to build some extremely long-range weapons that you can fire before the enemy closes enough to make missiles effective, then run away before the missiles can do any damage.

FIGHTERS

Think of Fighters as miniature ships. They carry smaller versions of weapons, which do less damage than full sized ship weapons but have the advantage of being on independently maneuverable platforms. To design a Fighter, you first pick the Direct Fire Weapon you want it to carry on the Fighter Tab. Then you pick a chassis and any modifications you want on to add to the base.

GAMER TIP: there is no one "best" weapon. For every weapon in your arsenal, there is a potential defense. The key is to analyze your enemies' ships to see where they are weak, then build ships to take the greatest advantage of that weakness. If they mainly have weapons that work at short range, perhaps you'll want to build up weapons that can engage them while they're too far away to use their good stuff. If they have weapons that penetrate shields very effectively, you may want to increase the shielding of your ships to compensate. The key is to outthink your enemy.

ENGINES PANEL

There are two types of Engines: Sub-Light Engines and Jump Drives.

SUB-LIGHT ENGINES

Sub-Light Engines must be on every ship built, even orbitals. They provide primary power for the ship, supporting all of its weapons and others systems and allowing it to move. Sub-Light Engines are only useful within a solar system. Ships with this type of engine can move during Space Combat but are never displayed on the Galactic Map, since they can't move across interstellar distances.

When putting an Engine on a ship, Auto-Build always assumes your vessel wants to move at the maximum speed available for the currently selected Sub-Light Engine technology. Thus, the default engine has a Max speed of 500 Near Space Units. A Sub-Light Engine can be made less powerful, however. Slower speeds result in smaller engines, allowing more space for cargo and other systems and reducing the overall cost of the vessel.

JUMP DRIVES

A Jump Drive allows a ship to move Faster Than Light, either across open space or along Jump Lanes. Unlike Sub-Light Engines, Jump Drives always take a set amount of hull space. For a given technology level, all jump drives take the same percentage of hull space. As technologies increase, Jump Drives go faster for less space.

DEFENSE PANEL

The Defense tab lets you allocate Armor and Shields to your ship in order to keep it alive longer in combat. These two systems work hand in hand to create a juggernaut that is nearly unstoppable — at least, that's the theory.

ARMOR
Armor is unique among ship systems in that it does not take up hull space, because it's on the outside of the structure. Armor works in two ways: by deflecting low-damage attacks and by absorbing damage that would normally go to vital internal systems. Once a piece of armor is hit, it vaporizes, so over time even a ship with heavy armor will lose its protection.

SHIELDS
Shields are composed of two parts, the Shield Technology and the Shield Generator. The larger the generator, the larger the amount of damage that can be absorbed by the shields. However, shields are incapable of completely absorbing an attack. Here is how it works:

When an attack hits a ship, the first thing hit is the shields. The shields absorb a portion of the damage, while the remainder passes through to the armor. The reduced damage may be too weak to dent the armor, in which case it is deflected harmlessly into space. However, if the attack penetrates the armor, the damage goes straight to internal systems or toward general hull integrity. If a hull is damaged too greatly, or if too many internal systems are incapacitated, the ship will be destroyed.

SHIP SPECIALS PANEL
Ship specials include various useful technologies such as Colony Bays, Outpost Pods, and electronic countermeasures.

Colony Bays and Outpost Pods provide additional hull space to carry all of the supplies necessary for the construction of new colonies or outposts on other worlds. Naturally, these both take up a large amount of hull space, though Outpost Pods are much smaller.

ECM (Electronic Countermeasures) helps the ship confuse enemy targeting systems. ECCM (Electronic Counter-Countermeasures) helps break through the ECM of opposing ships.

SHIP CONSTRUCTION REQUIREMENTS
There are certain key requirements for ship construction, which are outlined below.

INDUSTRY DEA
In order to build any ships (interstellar or orbital), a planet must have at least one Industry DEA (see *Dominant Economic Activities*, pg. 59). This will allow all ships of hull sizes 1 through 4 ("small ships") to be built at that planet.

SHIPYARD CAPACITY
To build ships with hull sizes greater than 4, you must construct additional Shipyard Capacity on your planet. Shipyard Capacity increases are discovered via research and are represented by the ability to build another level of Shipyard Capacity to a specific planet. These "buildings" are planetary in scope, and therefore are not located within a specific DEA.

Each building constructed to increase a planet's Shipyard Capacity adds one (+1) to the maximum hull size that can be built at that planet (so, if you have 3 of these buildings on a planet, you can build up to hull size 7 Cruisers and Heavy Monitors). There are a total of 10 of these buildings that can be researched and built on a single planet (bringing hull sizes building limits up to their maximum of 14). Unfortunately, each building costs progressively more than the previous one in both construction *and* maintenance. Thus, you will not want to build all 10 of these Shipyard Capacity buildings on every planet (because of the maintenance overhead), but only on carefully selected planets that can be defended properly.

THE ORION SECTOR PART XIII
WHO THREATENS THE ORIONS?

With the Antaran Sector silent and lifeless, the Orion Sector seems to stand alone, unchallenged by the rest of the galaxy and facing only its own internal strife. But this view is far from accurate.

The New Orions may have rejected Antaran ways, but they still remember their past. They know that there are other Elder Civilizations out there, somewhere, and beyond them, something else, deep in the Galactic Core, that is growing in power, slowly but surely. They know that they cannot fight that menace now, with Antaran power vanquished in an impossibly short time period. They need to rebuild, and the Orion Sector will be their fertile soil from which they plan to grow a new Hegemony.

The local Orion races see the immediate threat that the New Orions pose, and know that the Antarans have suffered some unidentified cataclysm. This is their one chance to fight their oppressors and return to independence and their expansion into the rest of the galaxy.

The Evon do not know of their Mizara masters; they only know of their divine mandate that tells them to expand and conquer in the name of their gods. But the Mizara are still out there, and there is no telling when they might come looking for their harbingers.

The Humans do not know that they are the failed and discarded remnants of an experiment to fight the Evon; they know only that the Evon make them uneasy. They also do not know that the final result of the Polarids' "Evon Killer" project, the Varakesh, are nearby, and they are preparing for an incursion into the Orion Sector to hunt down the Evon and their allies.

And finally, there are the Harvesters.

ENTER THE HARVESTERS

Harvester Gamma was not the only successful outcome of the Harvester Project. Another Antaran lab had engineered a semi-sentient Harvester (code-named Harvester Zeta) which, though not as lethal and swift as Harvester Gamma, had other advantages that the Antarans found intriguing. Harvester Zeta was much larger than the tiny, easily transmitted worm bodies of Harvester Gamma; it was designed to attach itself externally to a host body and live off of their mass for months at a time. Furthermore, Harvester Zeta was both sentient and sentience-absorbing — it could drain, process, and use the memories of its host for its own purposes. And, lacking a host, Harvester Zeta could survive for a longer period of time, even being capable of propelling itself in search of another host body and using base telepathic signals to paralyze its victims.

Commander Minax Ch'therion was the chief research director of the Harvester Zeta facility, and had received confirmation from her superiors to manufacture an army of them for several test runs. However, the Harvester Gamma project then went amok, and Minax wisely isolated her facility until she could safely plan an escape. Eventually, once several hundred thousand units of her Harvesters were prepared, she loaded them up onto a military transport vessel and left for the Orion Sector. There she witnessed the treachery of the "New Orions" as they turned their backs on Antaran mandates and forged their own empire. Minax released the Harvesters onto a Human outpost and let them grow and multiply and learn. She knew that soon there would be a vast army of them, and that the Orion Sector would soon suffer for its insolence even as she assembled the perfect army to aid the true Antarans, wherever they might be.

Of course, the Harvesters themselves were sentient, and soon evolved enough to develop their own plans and strategies for their development, plans that were not entirely in line with Antaran doctrine. They called themselves the Ithkul, and saw the rest of the Orion Sector as their feeding ground.

CHAPTER THIRTEEN: VICTORY CONDITIONS

The victory conditions are the rules or definitions by which you win the game. There are three conditions that you may select in order to win *Master of Orion 3*, and each of them offers a different path to victory with their own unique approaches and strategies.

Victory conditions are not mutually exclusive and you can have more than one condition set. When more than one are selected, you may fulfill any one of them in order to win.

- **Be Elected to Lead the Orion Senate —** The "subtle knife" of victory conditions, this requires that you use your skills as a negotiator and manipulator of both your people and other empires in order to have the inhabitants of the Orion Sector see you as the chosen one who unites the squabbling factions and brings them together in peace. While this will require you to take a few on the chin in order to be perceived as reasonable and rational, you should be ready to carry a big stick and swing it when needed.
- **Become the Sole Superpower—** This victory condition leaves room for no one in the Orion sector except you and your empire. All other empires must be completely destroyed or subjugated to your control to win the game.
- **Uncover the Antaran Mystery —** The most difficult and challenging of the victory conditions, this will require you to use your skills in every area of the game, from Technical innovation and invention to the ability to infiltrate another empire undetected. In addition, you will need to send Task Forces on special missions of exploration into uncharted space (see Antaran Expeditions for further details).

GAMER TIP: There are clues scattered throughout the known galaxy that may increase the chances of discovering one or more of the Xs.

Once you've discovered an X, your scientists will begin immediately to figure out how to use it by starting a research project — the same way as they do for other technologies. That X will no longer be available to other empires, so protect it carefully.

Xs can also be discovered through exploration of the known galaxy, through conquering another empire that has one of the Xs, or through espionage.

EMPIRE OVERVIEW

The empire overview allows you to see at a glance the current state of your empire, as well as being able to compare yourself against other known empires in the galaxy. The level of knowledge that you have about another empire, and the accuracy of that information, are entirely dependent on your current diplomatic status plus your spies and moles in that empire. Get those "black ops" teams cracking!

EMPIRE FOR ANALYSIS

This gives you the top-level breakdown of the empire that you want to assess. To change which empire you want to examine, simply activate the drop-down menu and select the appropriate empire. The empire's information will be broken down as follows:

Powergraph Rank — tells you where the empire ranks overall in the galaxy in terms of cumulative power compared to other empires. This number is the sum total of key attributes of that empire. It is a weighted composite of the following factors:

- **Population —** Relative population of your species in the galaxy. Note: population points in unrest or revolt, and those in militarily contested areas, are not counted.
- **Research —** Level of advancement in the schools of Physical Sciences, Energy, and Mathematics & Computers.
- **Wealth —** Amount in the Imperial Treasury / 100.
- **Military Might —** Total values of all military units., including total number of hull sizes, counts of each type of army unit (with greater weight given to the higher-level units), and planetary shields/bases.

Species — Tells you what species the empire selected belongs to.

Orion Senate Status — Shows the empire's current status and ranking in the Orion Senate.

Interest Rate — Gives the empire's current interest rate on their finances.

Government Type — Shows the empire's current type of government.

Military Political Economy — Shows the economic policy under which the empire is currently functioning.

Forced Labor Policy — States what the empire's current policy and stance is toward Forced Labor, both organic and robotic.

Heavy Foot of Government — Gives the current modifier showing how much bureaucracy and governmental inefficiency is affecting the empire.

Strongest Allies — Lists the empire's strongest military and political allies.

Worst Enemies — Lists the Empire's sworn enemies and empires with whom it has ongoing conflicts.

Rules of Engagement Toward Us — Shows what the empire's current policy is toward yours in times of war. (see Rules of Engagement definitions, pg. 122).

Current Balance of Naval Forces — Compares the number of ships in your empire with the number of ships in the selected empire. Note that this does not adjust for technology levels or hull sizes.

YOUR EMPIRE

This panel tells you how your empire matches up to the selected empire in key areas. If you see large inequities between the two sides, it's a good plan to either make friends with them or make gains in the areas where you're behind.

In addition, this panel lets you select your Rules of Engagement toward the selected empire. Choose these policies carefully, as violation of them in times of war or conflict can have serious repercussions in the Orion Senate, not to mention other empires' perceptions of you.

POWERGRAPH RANK — As with the Selected Empire panel, this tells you how your empire ranks overall in the galaxy in terms of cumulative power compared to other empires. This is a weighted composite of the Population, Research, Wealth, and Military Might, as described earlier in this chapter.

CURRENT RELATIONS — Shows the current mutual level of trust and understanding between your empire and the selected empire. This ranges through many levels, which affect the decisions made by your diplomats. Listed from worst to best, the values that can appear in this category are:

- Feuding
- Loathing
- Hateful
- Jaundiced
- Troubled
- Tense
- Wary
- Uneasy
- Neutral
- Calm
- Relaxed
- Peaceful
- Cordial
- Amiable
- Friendly
- Harmonious
- Solidarity

Current Relations State — Shows your formally established diplomatic relationship with the selected empire: This determines what is possible with the other empire. If there is an Enforced Peace, there can be no war. And Trade can only occur if there is a Trade Agreement between the parties.

No Contact	The parties have never met
Enforced Peace	The parties were previously at war, but no longer
Treatied	There is a formal treaty of some sort in place
No War, No Peace	Neutral relationship with no formal ties
At War	War has been declared by one party or the other

Casus Belli with Selected Empire — Lets you know what your citizens think of the selected empire. If, for example, they have made a pattern of using conquered Ethereans as forced labor units in another empire, and you are playing the Etherians, your people are more likely than not going to have less-than-favorable opinions toward the selected empire and its people. This factor affects the actions of your military leaders and your diplomats. It's difficult to declare war with another empire if your people like them. And it's equally hard to establish treaties with empires who they dislike intensely. Attempts to act otherwise will tend to cause unrest in your empire.

Unrest Level — Shows the current relative state of unrest throughout your empire. Negative numbers are good — the larger, the better — because they mean that there are many influences making your people happy. Positive numbers mean that there are more influences making your people unhappy than happy. This will require your immediate attention, since people who are unhappy will tend to remain the same or only calm down very slowly unless you intervene.

Heavy Foot of Government — In the same fashion as in the Empire for Analysis panel, this gives the current modifier showing the extent to which bureaucracy and governmental inefficiency are affecting your empire.

Rules of Engagement with Selected Empire — The Rules of Engagement publicly state your military policy in times of war and conflict with a given empire. Select this policy with care; violations can affect not only your relations with the selected empire, but also your status with other empires and your standing in the Orion Senate. To select the rules of engagement toward the selected empire, click on the drop-down menu and select the desired policy. These primarily influence the actions of your admirals in fleet combat. The policies are:

Quiet Front	Don't attack the other player
Defensive Front	Attack only if confronted
Total War	Attack always

VICTORY CONDITIONS SCREEN

On this screen you'll see how close you are to winning the game and how you're doing in various areas of the game. You'll also be able to deploy and monitor the status of expeditions searching for the lost Antaran Xs.

Victory Conditions

This panel lays out in black and white (or, more accurately, black and light blue) how you are faring in the game and how close you are to proving that you are indeed the Master of Orion.

Sole Survivor — Tells how many *other* players, both AI and human, are still in the game. If Sole Survivor is your victory condition, it is only when this number reaches zero that your empire will win the game.

Senate President — Gives you the percentage of votes that you received in the last Orion Senate election. In order to win with this as one of your victory conditions, you must gain a majority of the votes in the senate, so get busy shaking hands and kissing babies! Note that some empires have more votes than others, particularly the New Orions, so this isn't as easy as it sounds.

Antaran Xs — Shows the current number of Antaran Xs you've acquired (see Antaran Expeditions for further details). You need all five of these to win with this as one of your victory conditions.

Your Current Victory Point Score — The PowerGraph score for your empire.

Victory Point Position — Your empire's comparative PowerGraph ranking against all other empires in the galaxy.

Currently Engaged in These Wars — This panel summarizes the empires with whom you are currently at war. On the left side of the panel you will find the Empire's name, and on the right side of the panel, you will find the current Rules of Engagement with that empire. This is a scrolling list and will expand as needed to show all current conflicts.

ANTARAN EXPEDITIONS

THE SECRETS OF THE ANTARAN Xs

Thousands of Galactic cycles ago, the Antarans overpowered the native Orion races and became ruthless tyrants that ruled the Orion sector. It is rumored that the Antarans' hunger for domination of the Orion sector was fueled by the whispered tales that the original Orions had discovered the secrets to running a perfect civilization. The Antarans knew with these secrets in hand, they would be an unstoppable force in the universe and that no one, not even one of the surviving Elder Races of Center One, would be able to stop their complete domination. They tore apart the Orion Sector as they searched with surgical precision and overwhelming brutality. Then, suddenly, the population and

civilization of the Antarans simply vanished, leaving a handful of remaining Antarans to frantically repackage themselves in a kinder, gentler guise as the New Orions.

No one, not even the remaining Antarans/New Orions, know what happened to the majority of the Antaran population, or if they had successfully uncovered the rumored secrets of the original Orions. There are whispered rumors and tales however that there are five relics, that if found, will unlock not only the ancient secrets of power, but also reveal the fate of the Antaran population. These relics have been dubbed the 'Antaran Xs', and are viewed as either a fool's tale spun out of belief over knowledge, or the missing key to ruling the Orion sector.

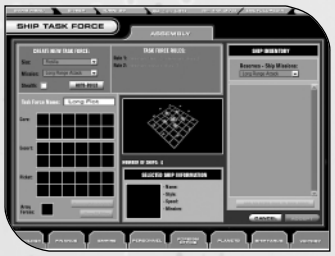
In order to find these missing/mythical relics, you'll need to invest money, time and resources. Some of your efforts to find the Xs will need to be spent in exploration, war, espionage, and perhaps even diplomacy. However it is assumed that many of the Xs (if not all) are no longer in the Orion sector and have been spirited off into unexplored areas of the galaxy. In the Antaran Expeditions panel you will send task forces out into both charted and uncharted space to try to find the Antaran Xs, as well as monitor the progress of Task Forces you've already deployed.

SEND AN ANTARAN EXPEDITION — By clicking on the drop-down menu, you can select the size of the Task Force you wish to send out. A small task force will cost less and be generated quickly, whereas a large Task Force will be better equipped for the rigors of a long and perilous journey into the unknown. You as the player will need to carefully balance the cost versus the odds of survival. Once you've selected the desired size, click the 'Deploy Expedition' button to give the orders to your ships. A Task Force will be assembled and dispatched.

STATUS OF EXPEDITIONS — Lets you know the status, both good and bad, of the task forces searching for the Antaran Xs. In this panel you will see a scrolling list. On the left are the Task Forces currently searching for the Antaran Xs, organized by their size. On the right is a status report, letting you know the current location of the Task Force, how it is holding up, and its current level of success.

CHAPTER FOURTEEN: MILITARY UNITS

SHIP TASK FORCE ASSEMBLY PANEL



Task Forces and Armies are formed, modified, and disbanded via the Imperial Reserves. Designing Task Forces is a very similar process to that of ship design and for a very logical reason. Where a ship is an entity composed of various parts (Life Support, weapons, shields, engines, and so forth), a Task Force is an entity composed of various ships (escorts, line ships, carriers, transports, etc.). Just like every part on a ship has a function that contributes to the whole, so every ship in a Task Force has a function that contributes to the whole. *In many ways a Task Force is similar to a single ship.* When a new Task Force design is requested, your Leader automatically recommends a design based upon that Task Force's mission. Like Ship Design, you don't have to start with a blank screen and place every ship in it from the drawing board up. Instead, you can take good suggestions and simply tweak them to their satisfaction.

The Reserves are where all Ground Force Units and Starships go when they are not actively mobilized in an Army or Task Force. To see what is currently in your Reserves, you open your Ground Force Creation screen or the Task Force Creation screen. Units available to be added to a Task Force or Army (depending on which version of the screen you have gone into) are listed here.

CREATE A TASK FORCE

To create a Task Force, first select the size of the desired Task Force and the basic mission it will undertake. These two items determine the basic outline of what ships need to be included. For instance, a Long Range Space Superiority Task Force of Flotilla size must have at least 5 ships with the Long Range Space Superiority mission and cannot exceed 8 ships in size. The rules are listed in the information panel on this screen.

ADD A SHIP TO A TASK FORCE

To put a ship into a Task Force, select the ship under the Ship inventory section then either drag it onto the desired Task Force Ring or click the Add This Ship button to have it automatically go to the correct ring. Repeat this until you have a Task Force you are happy with, then hit the Accept button. Note, that Transports require a separate step, since you must create a Ground Force as well.

CREATING A NEW TASK FORCE

Task Forces can be created using any combination of ships already in the reserve and current *ship designs*. Ships placed in a Task Force that have not yet been built (those based on current ship designs) are added to it once construction is completed. The Task Force will be mobilized when enough ships to satisfy all the rules for organizing are met.

Task Force Rings
Every Task Force is composed of three groups, which we (loosely) term rings:

- **Core —** This is where the most important ships in the Task Force are located, along with some of the ships assigned to protect them.
- **Escort Ring —** This is the next ring out from the core.
- **Picket Ring —** This ring is the farthest from the core, and may vary in size depending on the circumstances.

Ship Roles in a Task Force
There are three roles a ship can fulfill within a Task Force, as follows:

- **Mission Ships** are located in the core, and have a mission that is necessary in order to fulfill the Task Force mission. A colony Task Force might contain colony ships, outpost ships, exploration ships, and troop transports as mission ships, for instance.
- **Escorts** are located in the escort ring. Their job is to place themselves between the mission ships and any threats, and protect the mission ships at all costs.
- **Pickets** are located in the picket ring. These are the Task Forces eyes and ears, whose job is to provide early detection and (occasionally) engagement of incoming threats.

TASK FORCE TYPE
The first thing you need to do when creating a new Task Force is to set the Task Force type, which defines what types of ships are allowed in the Task Force and tells the leader what types of actions to take in battle. In addition, a Task Force can be designated as a stealth Task Force. Click on the drop-down list box and make your choice.

TASK FORCE SIZE
Next, you need to define the Task Force's size. The various Task Force sizes are listed below:

NUMBER OF SHIPS	FORCE NAME
1-2	Detachment
3-4	Squadron
5-8	Flotilla
9-16	Wave
17-32	Pack
33-64	Armada

MISSION
Finally, you choose the type of Task Force you want. Only certain types of ships qualify to be mission ships for each Task Force mission. These restrictions are as follows:

Colony Task Forces must contain at least one colony or outpost ship. They may also contain exploration, transport, and assault ships as mission ships.

Reconnaissance Task Forces may only contain reconnaissance and electronic ops (intelligence gatherer) ships as mission ships.

Assault Task Forces must contain at least one assault ship. They may also contain planetary bombardment ships as mission ships.

Troop Transport Task Forces may only contain transport and assault ships as mission ships.

Indirect Fire Task Forces may only contain indirect fire ships as mission ships.

Long Range Space Superiority Task Forces may only contain long-range attack, planet destroyer, and indirect fire ships as mission ships.

Short Range Space Superiority Task Forces may only contain short-range attack, long-range attack, and indirect fire ships as mission ships.

Carrier Space Superiority Task Forces may only contain carrier ships as mission ships.

STEALTH TASK FORCES
You can opt to create a Stealth Task Force by clicking on the Stealth checkbox (this is *in addition to* its other functions, such as being a carrier or ECM ship, or being either Short-Range Space Superiority, or Bombardment, or other Task Force designation.)

For a Task Force, when this box is 'checked', *only* stealth ships will be permitted in it. If you try to manually add ships to that Task Force, non-stealth ships will be grayed out. If a grayed-out ship is selected for inclusion in a Task Force, a warning message will tell you that if that ship is added to the Task Force, it will lose its stealth status and special capabilities.

In combat, when a Task Force's name is listed (either with or without its Flag icon), its name will end in an asterisk (*) if it is also a stealth Task Force. *For example, if the Task Force dubbed* Glorious Mates *were a stealth Task Force, it would be listed everywhere as* Glorious Mates* *to indicate its stealth status.*

RULES FOR TASK FORCE CREATION
Similar to shipbuilding, a panel on the Task Force Design screen states the design restrictions for a Task Force in the form of a dynamic checklist. As critical ships are added, the rule reminding you to add those ships is checked off. A Task Force design will not be accepted that still has design rule violations.

GENERAL RULES
First, all ships in a Task Force must fill one of the standard roles: Mission Ship, Escort, or Picket Ship.

Second, a minimum of 50% (rounded up) of the total number of ships in every Task Force *must* be mission ships.

Finally, larger Task Forces require a minimum number of picket ships, all of which must be Reconnaissance ships. The rules will tell you exactly how many.

TASK FORCE TYPE RULES

If a Task Force is designated a "Starship" Task Force, all of the ships in it must be Starships (i.e., be equipped with Jump Drives).

If a Task Force is designated a "system" Task Force, all of the ships in it must be Starships or system ships (i.e., be equipped with a star drive). *Essentially, no orbital ships.*

If a Task Force is designated a "Stealth" Task Force, all of the ships in it must have a Cloaking Device.

RING RULES

There are certain rules and restrictions for which ships can be placed in each of the three rings of a task force (picket, escort, and core) regardless of the Task Force's mission and type. These are as follows:

- **Picket Ring —** *Only* recon ships are allowed in the picket ring.
- **Escort Ring —** *Only* long-range attack, short-range attack, and point defense ships are allowed in the Escort Ring.
- **Core Group —** *Only* long-range attack, short-range attack, point defense, and mission ships are allowed in the core. During combat, badly damaged ships from the outer rings may move into the core in an attempt to get out of the line of fire while conducting repairs.

ADDING AND REMOVING SHIPS

To add ships:

- Double-click on a ship in the Reserves List to send it to its proper place in the Formation Box display.
- Select a ship from Reserves List and click on the Add Selected button. You can Shift-click on multiple ships and then click on the Add Selected button to send them all to the Formation Box display.
- Select a ship from Reserves list and drag it over to the Formation Box. You can also Shift-click on multiple ships and then drag a bunch over to the Formation Box.

To remove ships:

- Double-click on a ship in the Formation Box to send it to the Reserves List.
- Select a ship from Formation Box list and click on the Remove Ship button. You can Shift-click on multiple ships and then click on the Remove Ship button to send them all to the Reserves List.
- Select a ship from the Formation Box and drag it over to the Reserves list. You can also Shift-click on multiple ships and drag to remove them.

Once you are happy with and have a valid Task Force design, enter a name for it and then click on the Accept Task Force button. Once confirmed, you will automatically be taken to the Task Force Deployment screen.

ARMY FORMATION ASSEMBLY PANEL

CREATE A GROUND FORCE

To create a Ground Force, you start from the Planetary level and select the Military Tab. Then, select the Create Ground Force button on the bottom of the panel. This brings up the Ground Force Creation screen. As with Task Forces, select the Size of the army you wish to create, then add in appropriate units from the Unit Inventory to fill it in. Once this is complete hit Accept and the Ground Force is mobilized to the planet you began from. The exception to this is in Troop Transports.

TROOP TRANSPORTS

Troop Transports are created in a two step process. Select the Create Ground Transport button on the Forces tab of the System screen. This will bring up the Ground Force Creation screen. Any Army mobilized on this version of the screen goes into a Troop Transport as opposed to a planet as normal. Once you confirm the Army makeup, you are taken to the Task Force Creation screen where a Transport task force is being constructed to fit the size of the army you are attempting to move. Hit accept on the Task Force Creation screen and the Task Force is mobilized in the system you are creating it in.

Although comprised of individual units (Grunts and Support units), Army Formations are called up from the Reserve, maneuvered to on-map locations, and brought up to strength with replacements as "formations." This screen and interface functions in the exact same way as Ship Task Force creation, only you are assembling and mobilizing ground combat units. Like Ship Design, you don't have to start with a blank screen and place every Army in it from the drawing board up. Instead, you can take good suggestions and simply tweak them to their satisfaction.

Armies (and again, "Army" is the generic term used for discussion purposes of all size ground unit formations) are created and examined in intimate detail on the Imperial Reserves screen. However, you begin the Army management process by defining what type of Army they want on the drawing board.

THE RULES OF ARMY CREATION

Like Task Force creation, there are certain rules that must be followed when putting Grunts into Formations:

- A formation of a certain size must contain no fewer than the minimum or no more than the maximum number of Grunts. Depending on its

quality, it will seek a certain level of size between the minimum and maximum when created and brought up to strength with replacements.

- A formation cannot have more than 1/3 of its maximum formation size as units of other than its type designation.
- A formation of a certain quality level must have a cadre of at least 50% of that quality **and** that type of Grunt. *Other Grunts in a unit of a different experience level will have their experience levels gradually altered over time to that of their formation.*

Similar to Task Force creation, a panel on the Army Formation Assembly screen states the design restrictions for an Army in the form of a dynamic checklist. As Grunts are added, the rule reminding you to add those units is checked off. An Army design will not be accepted that still has design rule violations.

FORMATION TYPE

The first thing you want to do is set the formation's "type" based on its dominant unit type (unit types define its general role in combat). Unit types include Infantry, Marine, Mobile, Armored and Battleoid.

FORMATION SIZE

The next thing to do is to define that formation's size. Formations come in three selectable sizes, Army, Corps, and Division. The size indicates the minimum and maximum number of Grunts allowed in that single formation as follows:

- **Division —** 2-4 Grunts + up to 1 Support unit
- **Corps —** 5-15 Grunts + up to 3 Support units
- **Army —** 16-40 Grunts + up to 9 Support units

FORMATION QUALITY

The final thing to do is to define that formation's average quality level. These are:

- **Recruits —** cheaper to maintain; will operate with the smallest number of units for their formation size.
- **Trained —** average maintenance; will strive to operate with the average number of units for their formation size.
- **Experienced —** above average maintenance; will strive to operate with 75% of the maximum number of units for their formation size.
- **Veteran —** high maintenance; all ground combat options; will strive to operate at the maximum number of units for their formation size.
- **Crack and Elite —** very high maintenance; all ground combat options; will strive to operate at the maximum number of units for their formation size.

ADDING AND REMOVING ARMIES FROM FORMATIONS

Adding and removing Armies from Formations works the same way as adding and removing ships from a Task Force (see *Task Force Assembly* Section).

Once you are happy with and have a valid Army Formation design, enter a name for it and then click on the Accept Formation button. Once confirmed, you will automatically be taken to the Army Formation Deployment screen.

ADDING REPLACEMENTS TO AN EXISTING ARMY FORMATION

All deployed non-Militia ground units (i.e., those not being built, in Reserve, or currently on a Task Force; in other words, those on a planet somewhere "doing their duty") *must* be part of an army formation. When a formation has suffered attrition, it can be brought up to strength by simply "adding replacements" to it. By selecting this command for a specific army formation, that formation will be sent a "detachment" of Grunts and Support units sufficient to bring it up to its preferred strength level (based on formation quality). The rules for receiving reinforcements are:

- That enough Grunts of the formation's type will be sent to re-establish its 2/3 type designation level, if necessary.
- That enough Grunts of the formation's designated quality (or higher) will be sent, if possible, to re-establish the 50% cadre of at least that formation's quality level, if necessary.

Once the above two restrictions are met, other replacement Grunts in the detachment will be pre-selected by the AI.

DISBANDING A FORMATION

When a formation is disbanded (i.e., voluntarily destroyed; this can only be done if it is on a non-besieged planet), when it retreats off a planet, or when losses destroy its last Grunt unit type, that formation is destroyed and removed from the roster. Any surviving components of the formation will work their way back to the Reserve.

CHAPTER FIFTEEN: COMBAT

When a new force enters a system or opposing forces exist there, the door to ship combat opens.

Space combat in *MOO3* takes place in the space surrounding a single planet in a given solar system, including all of its moons. Unlike previous games in the *MOO* series, battles are no longer conducted by large forces of independent ships. Instead, all combat is controlled through the maneuvering of Task Forces, each of which can contain up to 64 ships. In addition, *MOO3* combat takes place in real time, rather than turn-based.

Space combat will occur whenever two hostile or nonaligned fleets (each containing one or more Task Forces) are located in the same solar system at the end of a given turn. More than one space combat can occur in a given system on the same turn, and each player can experience more than one battle in the same turn (subject to the option settings made at the start of the game). It is the job of the Combat Scheduling screen to coordinate all of these battles.

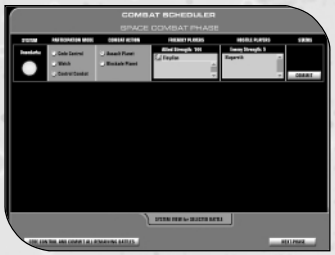
There are three phases to any battle in *MOO3*:

1. Fleet battles
2. Planetary bombardment, if any
3. Ground combat

In order to land troops on a planet, you must first control the space around that planet by eliminating all unfriendly forces from the system. This means that they must either retreat or be destroyed. Once this is accomplished you may bombard the planet, if you have assigned that mission to any of your attacking forces. Then you can land troops on the planet and engage in ground combat.

THE SPACE COMBAT SCHEDULER SCREEN

When a turn ends and space combat can occur, the Space Combat Scheduler screen will appear. This screen lists each potential combat that you know about (other players may see something different). For each battle, you may elect to participate directly or to allow your fleet admirals to fight the battle on your behalf. You can also elect to watch any of the battles that you see, acting as an observer who cannot control the action.



If you are involved in a potential combat in a system where neither you nor the other empire have any planets, your options are as follows:

Intercept the Fleet	Attack the other fleet. Combat will occur.
Hold Position	Stay back and wait to see if the other fleet attacks you. Combat will only occur if the other fleet selects the Intercept option. Otherwise, you both remain in the system but there is no space combat. Neither side can colonize planets in the system.

If combat occurs in a location where you have a colony, your options are:

Intercept the Fleet	Attack the other fleet. Combat will occur.
Defend the Planet	Same net effect as Hold Position, above.

If combat occurs in a location where the opposing player has a colony, your options are:

Assault the Planet	Attack the other fleet. Combat will occur.
Blockade the Planet	Same net effect as Hold Position, above.

If combat occurs in a location where both players have colonies, your options are:

Assault the Planet	Attack the other fleet. Combat will occur.
Hold Position	Same net effect as Hold Position, above.
Defend the Planet	Same net effect as Hold Position, above.

If you just want to watch, select the Watch button. You can select this option whether or not you're one of the main players.

Important Note: Once you have decided to participate in any given battle, you may not participate in any of the battles that precede it in the list. Be sure that you are willing to let those previous battles be decided without your participation before you accept a later battle.

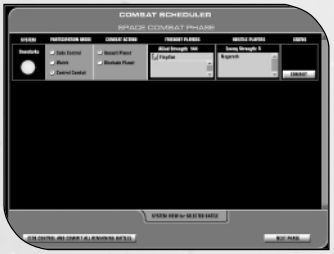
Once you have decided which battle to fight, you must wait until your opponent has also decided what to do. If both players elect to participate and at least one has decided to attack, a head-to-head space combat sequence will begin. If one or the other decides to let it play out algorithmically, the other player will face an AI opponent in battle. And, if both elect not to participate, the battle will be decided with no human involvement.

Note: Players can elect when starting a new game to limit the number of battles allowed per turn for any given player. If more battles are scheduled than can be played, the human player will only be allowed to participate in the designated number of battles before the next turn begins automatically. All remaining battles will be fought by the fleet admirals automatically on behalf of the player.

When all space combats are completed for this turn, you may see either the Planetary Bombardment Scheduler or the Ground Combat Scheduler, depending on the outcomes of the various battles.

SPACE COMBAT

THE OVERARCHING RULES OF SPACE COMBAT



There are some simple, overarching rules you need to follow when conducting Space Combat. These are:

- Each battle can have a maximum of *two* sides fighting concurrently.
- There is a maximum of 10 task forces per side (the "Command Limit"). If more task forces are brought to battle than can immediately participate due to the Command Limit, the extra forces will not be able to participate.
- Victory is declared when only one side's forces remain in the combat (the opposition has been destroyed or has retreated). A draw will be declared if both sides are still in the combat when time runs out or neither side has the ability to damage each other anymore. Note that neither side can land colonists or create outposts on the next turn if the outcome of the combat is a draw.

If more than two sides have forces at a system, the earliest arriving forces will combat each other to completion with the victor's surviving forces reorganizing between battles to face subsequent challengers that turn.

COMMANDING YOUR FORCES IN SPACE COMBAT

When fighting a space battle, you take on the role of the fleet admiral, directing your Task Forces and giving them orders as needed. In general, the captain of each Task Force is capable of maneuvering and fighting independently, and will only need periodic direction and high-level strategic help from the admiral. This frees you to watch the "big picture" of the battle and no longer concern yourself with the specific actions or status of individual ships.

At the start of a battle, each of your Task Forces will have orders based on their primary mission. Short-range Attack ships, for example, will attempt to close in on the enemy in order to take maximum advantage of their powerful short-range weaponry. Carriers will attempt to get in range and release their fighters, as will those with missile-bearing ships.

At any time, you may click on a particular Task Force to find out more information about its status and to give it new orders. A five-sided selection indicator will appear around that Task Force. If you select a single Task Force, detailed data will be displayed in the right section of the Task Force Information panel. If you select a group of Task Forces, you'll see icons for each one along with a "strength bar" depicting the percentage of original Task Force health for that set of ships.

The orders you can issue to your Task Forces are:

Move — Go to a particular location and stay nearby. Ships will avoid obstacles and try to maintain reasonable distance from opposing forces while moving to their destination.

Attack — The Task Force will attempt to maneuver to its optimal combat distance from the other unit or units, then attack. Targets can include Task Forces, orbitals, and planets.

Patrol — The Task Force will travel between two points repeatedly. It will avoid obstacles and try to maintain reasonable distance from opposing forces.

Halt — This will cause the Task Force to stop where it is. Since space combat, like naval combat, relies on maneuver, this is a potentially risky move.

Retreat — If you decide to leave a battle, or to remove some of your Task Forces, use the Retreat command. This will cause them to attempt to leave the field of battle, though of course the enemy may be able to get off some parting shots first.

General Retreat — Use this button to cause all of your surviving Task Forces to implement Retreat orders.

SPACE COMBAT KEY COMMANDS

KEYBOARD SHORTCUT	ACTION
'[' or Insert Key	Camera Rotate Left
']' or Page Up Key	Camera Rotate Right
';' or Home Key	Camera Tilt Back
'\' or End Key	Camera Tilt Forward
Arrow Left Key	Camera Scroll Left
Arrow Right Key	Camera Scroll Right
Arrow Up Key	Camera Scroll Up
Down Arrow Key	Camera Scroll Down
'='	Camera Zoom In
'-'	Camera Zoom Out
Tab Key	Follow Selected Task Force Toggle
'a' or 'A'	Attack
'm' or 'M'	Move
'p' or 'P'	Patrol
'h' or 'H'	Hold Position
'r' or 'R'	Retreat
'g' or 'G'	Toggle Green Grid
'z' or 'Z'	Toggle Key Scroll Switch
't' or 'T'	Toggle Task Force Indicators
'v' or 'V'	Toggle Voxel Ships
Return Key	Center Camera on Center of Galaxy
'1'	Go To Group 1
'2'	Go To Group 2

KEYBOARD SHORTCUT (CONTINUED)	ACTION
'3'	Go To Group 3
'4'	Go To Group 4
'5'	Go To Group 5
'6'	Go To Group 6
'7'	Go To Group 7
'8'	Go To Group 8
'9'	Go To Group 9
'0'	Go To Group 10

IF YOU DO NOT ISSUE A KEYBOARD COMMAND

- Right-click on a friendly unit issues a move command
- Right-click on a neutral unit issues a move command
- Right-click on an enemy unit issues an attack command
- Right-click on open space issues a move command
- Left-click on a friendly unit selects that unit and deselects the currently selected units.
- Left-click on a single neutral unit selects that unit and deselects the currently selected units.
- Left-click on a single enemy unit selects that unit and deselects the currently selected units.
- Left-click on open space does nothing.
- Lasso a single friendly unit is the same as a left-click.
- Lasso a single neutral unit is the same as a left-click.
- Lasso a single enemy unit is the same as a left-click.
- Lasso on a point in space is the same as a left-click.
- Lasso on a group of friendly units selects those units and deselects the currently selected units.
- Lasso on a group of neutral units selects those units and deselects the currently selected units.
- Lasso on a group of enemy units selects those units and deselects the currently selected units.
- Lasso on a group of mixed units selects the friendly units and deselects the currently selected units.

IF YOU ISSUE AN ATTACK KEYBOARD COMMAND

- Left-click on a friendly unit does nothing.
- Left-click on a single neutral unit does nothing.
- Left-click on a single enemy unit issues an attack command to all the currently selected friendly units.
- Left-click on a point in space issues an attack that space command to all the currently selected friendly units.
- Lasso a single friendly unit is the same as left-click.
- Lasso a single neutral unit is the same as left-click.
- Lasso a single enemy unit is the same as a left-click
- Lasso on a point in space does nothing.
- Lasso on a group of friendly units is the same as a left-click.
- Lasso on a group of neutral units is the same as a left-click.
- Lasso on a group of enemy units issues an attack command to all the currently selected friendly units.
- Lasso on a group of mixed units issues an attack (enemies) command to all the currently selected friendly units.

IF YOU ISSUE A MOVE KEYBOARD COMMAND

- Wherever you click, it moves to.

HOTKEY/MOUSE ACTION EFFECTS

Note: The below actions only work with friendly units, otherwise consider the action as if you just did a mouse click.

- Left-double-clicking on a taskforce will select all taskforces with the same mission.
- Holding down CNTRL and left-clicking on a taskforce will mimic a double click.
- Holding down SHIFT and left-clicking on a unit will add it to the group of currently selected units.
- Holding down SHIFT and left-clicking on a unit that is already selected will deselect it.
- Maximum number of task forces per side is 10.
- The Esc key works like undo.

THE PLANETARY BOMBARDMENT SCHEDULER SCREEN

Once space combat is over, you may be awarded the opportunity to bombard the enemy planet. In order for this to occur, you must have space superiority around the planet at the end of the space combat phase (all combats between all players must be completed, and you must still have surviving ships in that system).

Your options are as follows:

AI Control	Let the AI handle the bombardment for you.
Control Combat	Take control of the bombardment phase yourself.

When you have made your selection, click the Commit button.

Once all of the bombardments are completed, you will proceed to the Ground Combat Scheduler if there are any ground combats pending, Otherwise, play will proceed to the next turn.

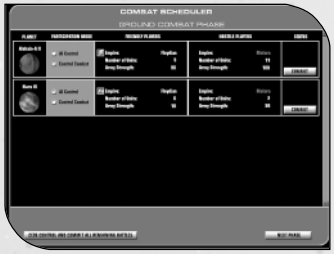
PLANETARY BOMBARDMENT

When you control the combat, you have the following options:

Destroy Planet	Destroy the planet, if you have a device capable of doing so (Stellar Converter).
Bombard Planet	Employs 25% of your weapons strength (bombs, beam weapons, etc.) against the planet. When you've selected this four times, you cannot select it again.
Unload All Ordnance	Fires all weapons at the planet. Naturally, you can only choose this once.
Drop Troops	Drops 25% of your troop strength on the planet. When you've selected this four times, you cannot select it again.
Drop All Troops	Drops all troops on the planet. Naturally, you can only choose this once.

The battle report will show the level of damage that you have inflicted on the remaining amount of buildings and population. Details will be shown in the Battle Report panel.

THE GROUND COMBAT SCHEDULER SCREEN



Once space combat and any bombardments are completed, you may have the opportunity to fight ground battles on one or more planets. In order for this to occur, you must have ground forces on a planet where another hostile or nonaligned player also has ground forces.

Note that ground battles can last for more than one turn, so you may find yourself facing the continuation of a land battle from a previous turn.

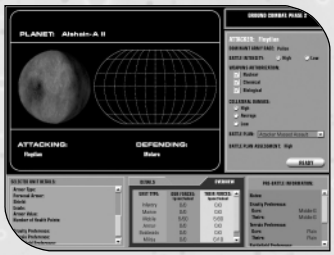
Your options in the Ground Combat Scheduler are as follows:

AI Control	Let the AI handle the battle for you.
Control Combat	Take control of the battle yourself.

When you have made your selection, click the Commit button.

Once all ground combats are completed, play will proceed to the next turn.

GROUND COMBAT



When you control the combat, your will see a detailed summary of your forces and the opposing forces on the planet. You have the following options:

Battle Intensity

- High — faster resolution, more casualties
- Low — slower but safer for your forces

Weapons Authorization

Allows or prevents the use of weapons of mass destruction: Nuclear, Biological, or Chemical.

Collateral Damage

- High — don't worry about killing population points or destroying structures
- Average — pursue battle at the desired level of intensity, but try not to do any more damage than necessary
- Low — give higher priority to safeguarding the population and structures than to pursuing combat. This is probably the selection you'll choose when defending your home planet.

Finally, you must choose a battle plan from the following list. Note that you will only see listed here the battle plans which your current leader is capable of executing. This means that some of these items may not appear:

Surrender	Give up; relinquish control of the planet
Massed Assault	The Charge of the Light Brigade: risky but sometimes effective
Vertical Envelopment	Use flying units to deploy behind enemy lines
Pronged Attack	Split your forces and try to get them from the sides
Sweep	Sweep all of your forces around to one side
Probe	Send a small force to infiltrate theirs
Harass	Send small forces to attack, without exposing your main troops
Echelon	Line up in a series of attack groups
Attrition	Attack with modest numbers of forces, and try to wear them down
Flank	Try to get some of your forces around their back or sides, so you can gain tactical advantage
Maneuver	Keep moving and make yourself hard to get
Limited Resistance	Fight back, but not aggressively. Protect yourself
Feint	Pretend to give battle in one place while actually sending the majority of your forces elsewhere
Ruse	Confuse the enemy with misinformation
Surprise	Attack very suddenly and hope to gain enough of an advantage to turn the tide
Trap	Pretend to fall back, then spring a trap on the enemy
Divide	Drive forcefully up the middle of the enemy formations, attempting to divide and demoralize them
Single Line	Line up in a single, broad attack line
Spread Defense	Spread out your defenses to make them harder to take out completely
Retreat	Back away, cautiously
Fighting Withdraw	Fight aggressively, but keep moving back and trying to preserve your strength
Ambush	Attempt to surprise the enemy by luring them into an area and then aggressively attacking

Your opponent will have a similar set of choices. Each has its strengths and its weaknesses against the others. As the commander of your forces, it is your responsibility to select the most appropriate battle plan, taking into account your own strengths and the likely selection that will be made by your opponent.

Once you've both decided what to do, combat will ensue. You'll hear radio transmissions from your commanders, describing the details of the battle, and you'll see each side's combat losses displayed as you fight.

The winner is the one who has eliminated enemy forces completely from the planet. If all forces of both sides are eliminated, the result is a draw.

CHAPTER SIXTEEN: ET CETERA

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- Processor Type
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Woodinville, WA 98072-9965
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